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What Place Should Athletics Occupy in the Life of the College?

The athletic situation in the American colleges has been brought prominently to the forefront through recent interviews with President Lowell of Harvard and President Meiklejohn of Amherst. In the opinion of these gentlemen sport should be curtailed.

There is no doubt in the mind of the average man who follows college activities that too great attention is given to sports by the average college student. The great man in the college is not the brilliant scholar, but the plunging halfback, the hard hitting baseball player, or the crack oarsman. Many feel that college athletics are too much specialized and that only a small percentage of the student body takes part in sport activities. Doubtless the majority of thinking men agree there should be some change, but what that change is depends entirely upon the viewpoint of the individual. THE MEDICAL TIMES has asked several gentlemen prominent in physical education and college athletics to present their views through the medium of these columns and it is a pleasure to append the opinion of these authorities.

INTERCOLLEGIATE ATHLETICS AND THE DEPARTMENT OF PHYSICAL EDUCATION.

GEORGE L. MEYLAN, A.M., M.D.,

PROFESSOR OF PHYSICAL EDUCATION AND MEDICAL DIRECTOR, COLUMBIA UNIVERSITY,

New York.

The conviction is growing in the minds of many friends of intercollegiate athletics that the present situation is full of dangers which threaten not only the welfare but the future existence of this exceedingly valuable collegiate activity.

I—Intercollegiate athletic contests are considered by college students and alumni as an extra-curricular activity which is not the concern of college faculties. This attitude is natural because athletic contests were initiated by students and from the first intercollegiate boat race in 1852 until about 1890, college faculties manifested little or no interest in this student activity; in fact, a majority of professors maintained an attitude of indifference or antagonism. The failure on the part of college officials to appreciate the definite educational value of athletics and to realize that the continuance of this activity outside of the college curriculum and the control of college officials constitutes a serious menace to the welfare of collegiate institutions is largely responsible for the difficult situation existing today. In general, college faculties have paid little or no attention to the administration of athletics except to adopt restrictive rules and regulations whenever participation in intercollegiate athletics seemed to interfere with the academic standing of the participants.

The tremendous increase in public interest and attendance at athletic contests during the past two years has served to accentuate the difficulties arising out of spectacular and commercialized intercollegiate athletics. Steadily increasing demands upon the time and energy of participants for training and trips, and greatly increased distraction of the whole student body from academic duties only serve to intensify the antagonism of college officials who still believe that study should be the chief activity of college students. One need not be a pessimist to foresee that unless a happy medium of rational athletics organized and administered as an integral part of the students' college education is found very soon we shall drift to the extremes of spectacular and commercialized athletics followed by complete prohibition when college officials realize that the matter is beyond their control.

II—Unfavorable Tendencies:

1. By far the most serious condition unfavorable to rational college athletics is that a considerable proportion of the men in immediate charge of athletics as coaches, trainers and advisers fail to recognize the essential and important differences between amateur, recreational, or educational athletics, and professional or commercial athletics. Many of these men had their training and experience in professional athletics; they are not college men, they are not college officers, and they know that their salary and tenure of office depend upon the success of their teams. It is not strange that these men have the ideals and employ the methods of professional athletics; indeed, it would be surprising if

they did otherwise. In general, the men who are college graduates and are appointed by the college to teach athletics as teachers are appointed in other subjects, have the amateur conception of athletics; they are able to see the place of athletics in its proper relation to the other interests and activities of college life.

It is only fair to say that there are a few exceptions to the rule in both classes. Some college graduates holding collegiate appointments have professional ideas and employ professional methods whereas a few non-college men employed by college athletic associations have a clear conception of amateur and educational standards and apply them in their work.

Besides the men who are employed to teach and administer athletics, there are in most colleges groups of alumni who exercise considerable influence in the adoption of the policies and methods employed. When alumni advisers are imbued with the amateur spirit and recognize that the physical and moral welfare of the students, and the educational interests of the college are more important than athletic victories, they can and do render valuable service by advising and helping in determining athletic policies. But, when the motive which prompts an alumnus to participate in the direction and administration of athletics in his alma mater is a desire to gratify his sporting instinct, then, his influence is always detrimental. The loyalty to alma mater which finds expression chiefly in placing bets on her athletic teams is a spurious form of loyalty which is likely to increase with successive victories and to diappear or even change to disloyalty after successive defeats. True loyalty finds expression in the support of teams that "play up and play the game" up to the last whistle whether they win or lose.

The attitude of students in athletic policies and methods is determined very largely by the attitude of the coaches, trainers and alumni advisers. They are young men and most of them easily influenced by the older men of strong personality who teach and advise them. After all is said and done, by far the most important reason why we should insist on clean, honest and rational athletics is the tremendous influence exerted by athletics on the physical, moral and social development of students. A prominent professor of ethics said: "In my classroom students learn the theory of right living, but on the athletic field they put the theory into practice and form habits of right living." Unfortunately, some of the teachings and practices in our athletics are not in accord with the principles of ethics.

2. Another influence unfavorable to the maintenance of rational standards in college athletics is the rapidly increasing commercialism which permeates every phase of athletic administration. The extravagent luxuries of yesterday have become necessities to-day. As much is spent on each player of a present day football team as was spent on the entire team some years ago. The fifty cent and one dollar seats at football games ten years ago are now one dollar and a half and three dollars. Here again there is a reasonable happy medium between the radical reformer who would abolish all gate receipts, and have the students buy their own athletic equipment, and the other extreme of spending exorbitant sums for elaborate equipment, a retinue of coaches and trainers, luxurious traveling, and all sorts of extravagance.

Excessive expenditures for athletic administration creates the necessity for large gate receipts. In order to get large gate receipts it is necessary to have a winning team and to schedule games with teams which draw big crowds. Therein lie the unfavorable tendencies in commercialized athletics. The necessity for a winning team leads to proselyting—offering material inducements to promising school athletes, and to the placing of undue emphasis on mere victory. Again, in the making of schedules it is most unfortunate when the purely commercial aspect of the drawing power of a team is allowed to supersede all other considerations in making selections.

3. An unfavorable tendency resulting from the inordinate desire for victory is the making of excessive demands on the time and energy of students for training and frequent long trips. It is a matter of common knowledge that only the exceptional students are able to keep up with their studies during the football season because of the large amount of time and energy devoted to football. The same thing is true, although in lesser degree, in basketball, baseball, rowing and other sports. The recent development of holding games in large cities by two teams from distant places, and, the so-called inter-sectional and international contests has been carried so far that one wonders how the members of some teams could give any attention to college studies.

4. Another most unfavorable tendency in college athletics to-day is the rapidly increasing tendency to recruit promising athletes by offering them material inducements. The practice of inducing college athletes to migrate to other colleges has been greatly lessened by the general adoption of the one year residence rule. The complete eradication of proselyting will not be accomplished until all the colleges adopt and enforce the migratory rule recently adopted by the Southern Intercollegiate Association which prevents a student from ever representing more than one college in athletics.

While we have made progress in abolishing the proselyting of college athletics, the practice of offering inducements to school athletes has greatly increased. Many college alumni groups have organizations for the purpose of systematically recruiting star athletes from preparatory and high schools. The competition is so keen that the bids are steadily rising and one wonders where they will stop. School boys who have demonstrated athletic ability are literally showered with invitations to dinners at college clubs, theatre parties, and week end entertainment at college fraternity houses. The senior year of many high school athletes is a continuous round of lavish free entertainment. The boys enjoy the experience and are rapidly learning to play the game for all it is worth. They no longer promise to enroll in the college where they are first entertained, but shrewdly defer announcing their decision until after they have enjoyed the hospitality of numerous recruiting committees. If the attempt to induce a boy to register in a particular college were limited to giving him a few good dinners, the only harm done would be to foster in the boy an exalted and distorted idea of his own importance and athletic ability. Unfortunately, the recruiters are prepared to go the limit for they must get the athlete. Unless many otherwise splendid lads are unscrupulous liars, they actually receive offers ranging from free tuition to all expenses including a liberal sum for pocket money.

The most deplorable feature of this nefarious business is that all these lads know that the material inducements offered to them are not legitimate scholarships awarded by the colleges, they know that they are offered these inducements because of their athletic ability and that the transaction is against the rules of amateurism. They do not know where the money comes from, but they are pledged to secrecy and appease their conscience by saying: "Well, they all do it."

The situation is bad. Is there a remedy? If so, it is not in more rules and regulations by college faculties so long as the teaching and administration of athletics is in the hands of men who are not responsible to the college.

III. Favorable Tendencies.

1. College faculties are gradually recognizing the educational value of athletics, as evidenced by the increasing number of institutions which include prescribed physical education courses in the curriculum. This is the first and most important step because recognition implies responsibility for instruction, and for the qualifications of the instructors. Inasmuch as the men who are put in charge of physical education courses must fit into the academic organization, it is essential that they possess the same educational, social, and professional qualifications as the officers of corresponding grades in charge of other subjects. The dignified position now accorded to college physical education teachers is attracting high grade college men to this branch of education.

2. The marked development of intramural athletics in recent years has done much to demonstrate practically the striking difference between rational, educational athletics and spectacular, commercialized intercollegiate athletics. The aims and methods of the teachers and the attitude of the students in intramural athletics are brought out in sharp contrast with the conditions prevailing in the highly organized intercollegiate sports.

3. Some colleges have assumed full responsibility for intercollegiate athletics and the results have been completely satisfactory, not only to the faculty but to the students and alumni as well. This has been accomplished by enlarging the size and scope of the physical education department to include instruction and administration of this activity. The general adoption of this plan would solve one of the most serious problems confronting American colleges to-day. It would make possible the elimination of the many evils which threaten the very life of intercollegate athletics to-day, while assuring the permanence of the great benefits accruing to students, alumni, and colleges from rational and wholesome intercollegiate athletics.

ATHLETICS SHOULD BE ON A LEVEL WITH OTHER ACTIVITIES.

EWALD O. STIEHM,
DIRECTOR OF THE DEPARTMENT OF ATHLETICS AND PHYSICAL EDUCATION IN INDIANA UNIVERSITY,
Bloomington, Ind.

Athletics in the life of a college should occupy, we will not say, a first place in the minds of the students, but should be more on the level with other activities. Without athletics or any sort of physical activity we are neglecting that side of our training so important to us, namely, our physical well-being, our health, our power to do things. Athletics bring out in a man what he is made of and the spirit with which he applies himself in the task of making good on a team will often follow him throughout his life and be of a great value to him in his future.

A man goes to college to get all that he possibly can from the different things that his college has to offer. Who does not care for a well-developed physical body as well as a well-developed mind. He who does not get in to some physical activity is a slacker to himself as well as to others.

Athletics often encourage a young man to go to college and he will often choose the college which in his mind has the best athletics. Athletics hold first place in the minds of many young men as their life work in the capacity of coaching and physical training. This truly is a worthy calling for a man who would teach the art of physical development and true sportsmanship and character.

In conclusion—athletics should be encouraged in the right manner and should hold its place in the colleges of to-day as an important factor in the life of the college. Without it we lose the spirit of Alma Mater so prevalent in a contest of athletics. We would lose the fighting spirit of the men who might participate. Would one rob a man of the chance to show his loyalty to his college, and that quality of fight to win? Let us keep the standard of athletics in college high, and with that ideal of manhood it will be of a help to him in his future.

CHANGES SHOULD BE MADE IN SPORTS POLICY.

CLARENCE W. MENDELL, PH.D.
PROFESSOR OF LATIN IN YALE UNIVERSITY AND CHAIRMAN OF THE YALE ATHLETIC BOARD OF CONTROL,
New Haven, Conn.

In the face of presidential pronouncements, it is perhaps rash for a Chairman of Athletics to lift up his voice at this time. President Lowell has been very widely quoted of late on athletic matters, and President Meiklejohn almost as extensively. Behind the statements made by both of these men lies the firm conviction, which is, I think, almost universal, that too much importance is attached throughout the country to the big football games. Prehaps those most closely connected with football are the most anxious that this situation should be corrected.

When President Lowell referred to football in his annual report he was simply repeating what he has consistently believed and said for many years. In a Phi Beta Kappa address at Yale more than ten years ago he pointed out with eloquent irony the tendencies in sport which have since so largely developed. With his position, as far as I understand it, I am entirely in accord.

The question, however, is not, as the public is apt to think, whether or not football is to be abolished as an intercollegiate sport. Football is a great and valuable game—too fine a sport to be lost. The problem is to protect it against abuses which threaten its existence. Of these the most insistent is the professionalizing of the game. By this I mean not merely the transfer into college of men whose sole object is to play football, but also the transfer of the game from the undergraduates to the coach.

At this point, however, I take issue with President Meiklejohn. I would not get rid of the coaches. I would insure the playing of the entire game by the undergraduates after they had been trained just as well as possible by the best coaches available. In the field of scholarship we try to give the undergraduate the very best that we have, and then we count on him to make use of it on his own initiative. Just so in football we should give the benefit of the best possible training to all the men who can be brought out to play one of the finest games ever invented, but let them play the games themselves.

As a practical step, therefore, toward accomplishing what we can probably agree is the object to be sought, it seems to me wise further to restrict the handling of the team during the game. Tad Jones has already spoken forcibly on this subject. He has advocated a change in the rules which would tend to place the game more in the hands of the players. I should go a step further than he has gone and be in favor of putting

all the coaches in the grand stand, or leaving them at home while the game is being played.

With regard to the second phase of professionalism, namely, the undesirability of the so-called tramp athlete, Yale suggested over a year ago an agreement by which no man who had represented one college should be allowed to represent another. There is no doubt that some injustice would be done to individuals, but the situation is one which calls for drastic action, and I believe that it is time for us to adopt some such rule as this, and, furthermore, that an additional provision should be made to the effect that any one transferring from one college to another, even if he has not played in the first college, shall be ineligible to play at the second until he has passed the standard entrance requirements. I hope that the day is not far distant when Harvard, Princeton and Yale can agree upon some such practical regulation as a safeguard for true sportsmanship.

I am not sure that I understand what President Meiklejohn intends by his suggestion of abolishing all boards of control as well as all coaches. The department of athletics has become too important a factor in our college training of today to make it wise, or even possible, to return to the haphazard methods of management which result from leaving its affairs entirely in the hands of the undergraduates.

Competitive sport is a real and valuable part of a college education, and the college or university has therefore a definite obligation to handle in the best way within its power this particular collegiate department. The obligation is just as strong as that which rests upon it with respect to any other department.

In the broadest spirit of sportsmanship I believe that there is general agreement between faculties and players and coaches. It is not difficult to point out the ideal in view of the existing evils. The more difficult, but at the same time more important, problem at present is to find means to safeguard the ideal against evils. Toward the discovery and application of these means we must all bend our heartiest efforts, not only for the good of the sport itself, but for the preservation of the spirit of sportsmanship in our colleges.

In connection with the question of supervision of athletics by coaches and by faculty committees, one thing ought never to be overlooked. The colleges are beginning to realize that they are responsible for physical as well as mental training and that the highest training in spiritual values which includes sportsmanship must come as a result of the best training along these two lines. It would never be right to abandon the progress we have made toward control of the physical training. At Yale every man who enters any competitive sport must be certified as physically fit by the Bureau of University Health and the Bureau thereafter exercises supervision through doctors and trainers of all the athletic work. These men are in close co-operation with the coaches but it is an accepted principle that the doctor in charge of any team is the final authority on a man's condition. Further than this every freshman must be thoroughly examined and if thereafter he does not take part in competitive sport he must, during his first year take a regular course in physical training. If the examination has discovered any physical defect that can be remedied, he must take corrective exercises during the year under the direction of the department for the purpose of making good such defects. In other words the physical examinations should not merely furnish information to an undergraduate, but should be and are the basis upon which his training is built.

It seems idle to discuss whether or not college athletics are to remain a part of college life. The great problem and one which is holding the interest of faculties more than any other at the present time is how to make athletics a real and valuable part of a college training. Just so far as possible the undergraduate should conduct his own sports, but he must be furnished the best technical and medical instruction if these are to be an asset to him and not a serious liability.

PRECAUTIONS TO BE TAKEN DURING THE TONSIL OPERATION

HAROLD M. HAYS, M.D., F.A.C.S.
New York.

Most operations on the tonsils, in children, have to be performed under general anesthesia. Ether is the anesthetic of choice in this country, although in England and in France, chloroform is used much more often than ether, with no bad effects. One cannot insist too strongly on the necessity of having an expert anesthetist to administer the anesthetic, and if it is possible, the anesthetist should use some form of suction apparatus to keep the throat clear from blood at all times, so that the operator is able to see every necessary part without difficulty.

Within recent years a great deal has been written upon the subject of lung abscess as a complication of the tonsil operation, and it is still a mooted question as to exactly how the abscess occurs. But it is probable that in a certain number of cases, lung abscesses are the result of the inspissation of blood and mucous into the lungs because of unwarranted gagging, due, often to the administration of a poor anesthetic. This statement does not hold true in every instance, proved by a case reported last year, of a lung abscess occurring in a patient who was operated upon under local anesthesia.

The control of hemorrhage at the time of operation is a vitally important matter. If the operation has been performed in a clean manner, the oozing that takes place can be controlled very readily by pressure with gauze sponges for a short time. It has been our custom, invariably, to immerse these sponges in a solution of thrombo-plastin or coagulin, and hold these in place for a few moments, when all oozing stops. If a large vessel has been ruptured, either vein or artery, it is necessary to grasp it with an artery-forceps and to tie it off in a similar manner to the tying off of a vessel in other parts of the body. In older children and in adults where the oozing is free, and yet where there is no distinct hemorrhage, it is advisable to suture the pillars of the fauces tightly together with a fine catgut which will dissolve in the course of a few days. It is unnecessary to pack any gauze between the pillars before saturing.

As a rule, the general physical condition of a patient should not be interfered with as the result of a tonsil operation when properly performed. However, severe and prolonged hemorrhage may cause a great deal of trouble and considerably devitalize the patient. In instances in which the patient's condition seems to be particularly bad, it is always advisable to keep the patient calm after the operation, and so a hypodermic injection of morphine ¼ grain, and smaller doses, according to age in very young children, should be given before the patient leaves the table. Sometimes the irritation in the throat and the hemorrhage can well be controlled if it is not too severe, by application of ice cloths around the neck or an application of an ice-bag which should be kept on for two or three hours after the operation.

A Safe Method of Therapeutic Aspiration in Pleura Effusion

HOWARD LILIENTHAL, M.D., F.A.C.S.,
New York.

To remove safely, painlessly and efficiently a large effusion from the pleural cavity a number of methods have been devised. The one most frequently in use is that which is known by the name of Potain.

In this method and in almost all the other ordinary ones, suction, more or less powerful, is the principal factor. Ordinarily, a needle of fair size is employed—larger in calibre when pus is to be withdrawn, smaller if the effusion is serous; and the degree of suction is not usually measured but is often very strong. We have been taught to plunge the instrument by a sudden push into the selected interspace and to draw off the fluid until the cavity is empty or until some untoward sign such as coughing gives the signal to end the procedure. While this method in most cases has proved satisfactory, still there have been instances in which great distress, hemoptysis, hemothorax, pneumathorax, even sudden death have occurred.

Pleural eclampsia is a form of convulsion unexplained but propably reflex in character. It may follow the introduction of the needle or may appear during the aspiration. Fortunately, this phenomenon is extremely rare. Its appearance should be the signal for the immediate interruption of the operation. Cough during the procedure is particularly dangerous because the expanding lung is liable to strike the point of the needle with resulting trauma from which bleeding into the lung itself or into the pleural sac, dangerous pneumothorax or even emphysema running into the mediastinum and up into the neck and face may occur. Another danger is that of forcibly sucking back the mediastinum with its contained organs after long displacement by the fluid. Indeed, there have been reported cases in which embolism has occurred when a diseased heart or great vessel long in an abnormal position has been powerfully drawn back to where it belonged.

In the *British Journal of Surgery*, 1913, Volume 1, No. 2, page 228, H. M. Davies has observed that distress during a paracentesis may be relieved by permitting a small amount—about 100cc.—of oxygen to flow into the chest. He used two needles, the lower one for aspiration and the upper, a few spaces higher, for the oxygen. He alternated between the two needles according to the sensations of the patient until the aspiration was complete. The oxygen became absorbed and the lung gradually—not rapidly—returned to its normal position. If nitrogen is used instead of oxygen, the absorption of the gas is slower. Torek (Johnson's Surgical Therapeusis, Volume III, page 526) describes a method in which the same result can be obtained by merely permitting air to enter the chest taking the place of the fluid which has been withdrawn. The air does not even have to be sterilized for the danger of infection is groundless, just as when air has been admitted to the peritoneal cavity. His mode of procedure was to place the patient across two beds on his side or with the location of the proposed aspiration lowermost. The beds should be about a foot apart so as to leave room for the surgeon to work. A trocar and cannula is used and the fluid is allowed to escape spontaneously without any suction into a vessel on the floor. Air partly replaces the fluid.

For more than five years I have employed a device based upon the air-displacement principle so managed that in the absence of sacculation the expansible lung may be made to fill the chest again after the aspiration has been completed. The technique is extremely simple and can be carried out without complicated apparatus and in almost any surroundings. The patient may sit or lie but I have found the sitting position easiest for the operator and, as a rule, most comfortable for the patient. In working at the Front during the war many cases of hemothorax were treated by this form of aspiration, the blood in this condition being for the most part fluid and of very low coagulating power, probably because of its mixture with serum.

The apparatus and technique are as follows:

Apparatus:

1. A hypodermic syringe with needle for cocaine or other local anaesthetic.
2. A sharp scalpel.
3. A trocar and cannula of size about 10 French, more or less. Any trocar and cannula will do so long as it permits a rubber tube to be affixed to the cannula. The best kind, however, is that which is used for emptying ovarian and other cysts. It has an offset to which the tube may be attached and the trocar is drawn back through a packed chamber so that the fluid can escape only by the offset. This kind of special cannula has the tube attached in advance and avoids the annoyance of affixing it with the instrument in position.
4. 2 per cent. lysol solution.
5. A few feet of rubber tubing to fit the cannula.

Procedure:

The patient sits up in bed or even upon a chair. A little of the anaesthetic—1 per cent. novocain with 1 to 10,000 adrenalin is a good mixture—is injected into the skin causing the formation of a small wheal. Then a minute incision through the skin is made with a sharp scalpel, the cut being long enough to be a loose fit for the cannula and not more than ¼ inch in length. Then the hypodermic needle is again inserted at right angles to the skin, plunged directly into the tissues and a few drops more of the anaesthetic are injected. Finally, another drop or two is injected into the pleural cavity. Now the trocar and cannula previously moistened with a little 2 per cent. lysol solution is slowly pushed on into the thorax. The lysol lubricates the instrument so that it enters without friction and the sense of resistance of the tissues is nicely transmitted to the hand. It is thus easy to recognize the instant when there is no longer any resistance and the cavity has been reached. This has a great advantage over the usual savage stabbing plunge between the ribs which so startles most patients. The sterile rubber tube which is attached to the offset of the cannula should be about 2 feet long. It should hang vertically so that a little gravity suction is obtained. The trocar is now withdrawn and the escape of fluid begins. If there is any tension within the thorax the flow is steady and continuous until the pressure within and without the chest is equalized. Then, according to the difference in pressure on expiration and inspiration, the stream is inhibited and recommences; at last, air begins to enter the chest on inspiration while fluid flows out on expiration. When no more fluid escapes the cannula should

be partly withdrawn when probably the flow will be for a short time re-established. Should the patient cough during the procedure there is no danger of his injuring his lung for there is no shart point for the viscus to strike. The end of the cannula will not injure the lung and, of course, on entering the chest originally in a case of general effusion the lung is not touched by the point of the trocar which is arrested before it reaches the viscus.

Let us say, now, that the greater part of the fluid has been withdrawn and that much of the space which it occupied is filled with air, and let us suppose we wish to expel this air and have its space in turn occupied by the re-expanded lung. It is but necessary to place the end of the rubber tube under water and to pinch it on each inspiration of the patient so that neither air nor fluid can enter the chest while on expiration the tube is liberated and bubbles appear at the submerged end. This process in the case of a vigorous patient can be accelerated by causing him to strain with the glottis closed or even to utter a long phonation. As soon as no more bubbles appear on expiration or on straining the instrument is quickly withdrawn from the thorax.

The X-ray examination has frequently demonstrated to me the complete filling of the thorax by the lung following this manœuvre and this evidence when noted immedately after the aspiration is most convincing. The danger of forcibly sucking the heart back into its normal position is absent for no powerful pull is exerted, the mediastinum coming gradually back to normal or even remaining out of place and returning only after many hours or even days and without distress to the patient.

I have used this method in withdrawing nearly every kind of fluid which is found within the pleura. The method is also of diagnostic use in establishing the presence of adhesions holding down the lung as in certain cases of sacculated empyema. Here a large cannula should be used, say a No. 12 or 13 French, and the straining of the patient will not aid greatly in the expulsion of the fluid. The confined lung can probably not at once be made to refill the chest. One may judge the conditions quite accurately by the quantity of air in bubbles which escapes from the submerged tube when the patient strains.

It is not easy by mere description without the ocular proof of superority to supplant an old and tried method by a new one. The aspiration of the thorax here described, however, has never failed to impress those who have seen it done and it has made a good percentage of converts.

52 East 82nd St.

Pyelitis

HENRY H. MORTON, M.D., F.A.C.S.,

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Our first case, while not spectacular, is one of great importance, because it is the sort of case that the physician encounters very frequently. The diagnosis is not easily made by the beginner, for he is not likely to recognize those salient features which make the diagnosis easier for an older practitioner.

This man is 35 years of age and is a rather pale, septic looking individual. He gives a history of feeliny badly for the past two months, and there have been pus and shreds in the urine. He has been treated for chronic prostatitis and was finally advised to come to the hospital for cystoscopic examination because the condition was not improving.

On entering the hospital physical examination proved negative, except that massage of the prostate showed pus in the expressed secretion. He was cystoscoped and the urethers were catheterized. The urine withdrawn from the right and left kidneys showed respectively much pus and quantities of bacillus coli. A radiograph was made, but no shadows indicating stone were found. Iumediately following cystoscopy his temperature went to 103°. The following day the temperature was 104° and he appeared like a very sick man. The urine was strongly acid and contained large quantities of pus. There was marked tenderness over both kidney regions on palpation.

We had, then, facts necessary to make a diagnosis of double pyelitis, due to infection with the colon bacillus.

When you are called to see a patient who has been suddenly taken ill with high temperature, preceded by chill, but not always so, with pus in the urine and tenderness over the kidney region, provided examination of the heart, lungs and abdomen is negative, you are justified in making a probable diagnosis of acute pyelitis of either one or both kidneys. The refinements of diagnosis, such as ureteral catheterization, pyelograms, etc., are quite inadmissible in such a case at this time, as it is not a safe procedure to do cystoscopy or ureteral catheterization in a patient suffering from a sudden attack of pyelitis. These refinements must wait until the temperature has become normal and the case has reached the subacute stage. Even then there is a slight amount of danger of re-lighting the attack by instrumentation, as you note happened in this case following cystoscopy.

In very recent times the proper line of treatment to follow in such a case has been made very clear, and one of the best expositions of this subject may be found in a little book by Frank Kidd, of London, entitled "Common Infections of the Kidneys," which is a masterpiece of clinical study.

Having made our tentative diagnosis, what shall we do in the way of treatment? Urotropin was the drug which was administered routinely in these cases up to very recent times. Experience has shown, however, that treatment with urotropin in these cases is very ineffective. We have found that in patients suffering with pyelitis caused by the bacillus coli, the best method of treatment is to flood them with an alkali, by the administration of 60 grains of citrate of potash every two hours until the urine becomes neutral. Then the quantity of citrate of potash taken may be somewhat reduced, but it should be continued for ten days before cessation of the drug. It is most gratifying to observe the drop which takes place in temperature within twenty-four hours after the administration of the citrate of potash is begun. In the young man before you the temperature dropped at once from 104° and he became normal on the sixth day and has continued normal ever since.

After the alkali has been continued for a matter of ten days it has accomplished its purpose, and then uro-

Pyelogram Calculus in Right Kidney

tropin may be given with advantage, but the urotropin is ineffective in urine that is alkaline and acid sodium phosphate should be administered at the same time in order to cause the urine to become acid again, and the urotropin may be continued for two or three weeks. Under this treatment, in favorable cases the urine will become clear and free from pus, and frequency will diminish. Oftentimes, however, the urine will still contain a moderate quantity of pus, showing a chronic subacute inflammation in the pelvis of one or both kidneys. This is an indication for local treatment by means of lavage of the pelvis of the kidney through a ureteral catheter. Probably the best solution to use is nitrate of silver, although the Brady Institute speaks highly of mercuro-chrome.

The use of collargol, which is highly recommended by Kidd, is attended with danger since the experience with collargol in pyelography show that in a certain number of case a disintegration of the kidney, and suppression of urine, follows its use, and while it may be a very efficient means of combating infection, the dangers attendant upon its use are too great to make it safe.

Having outlined the diagnosis and treatment of such a case, we may study the etiology, for unless the cause is removed, a focus of infection may be left behind which will light up another attack.

Most of the cases of pyelitis are due to infection with the colon bacillus, which is picked up from a focus somewhere in the body by the blood-stream and the kidneys, in attempting to filter out the bacilli, become infected. This focus is frequently in the colon, around the roots of teeth or in the prostate, or it may be in any area of chronic suppuration. Under ordinary conditions the body resistance keeps these invaders in check, but exposure to cold, fatigue, overwork, or any depressing circumstances will lower the body resistance so that the tisues are not able to take care of the organisms and an attack, such as has just been described, ensues. So, in addition to the general and local treatment in these cases, we must also strive to locate and remove the original focus from which the bacilli are derived by way of the blood-stream.

As to the reason for the sudden drop and improvement in the temperature which takes place after flooding the body with an alkali, we can only advance the theoretical explanation that the alkalinity of the tissues is unfavorable to the growth of the colon bacillus, and that as soon as a degree of alkalinity is induced the organisms cease their deleterious effect upon the body.

Case II.—Pyelitis from Renal Calculus. The next case that I wish to show is also a case of pyelitis, but instead of its being due to infection with the colon bacillus there is a local cause within the kidney itself for the inflammation of the pelvis of the kidney.

This patient is a man 44 years of age, who gives a history of having had more or less trouble for the past five years, with pain over the right kidney which radiates downward toward the penis. He has been passing pus in the urine, which is of foul odor. He states that of late the right kidney has been worse and the attacks more frequent.

On examination we find nothing but slight tenderness on palpation over the right kidney. The urine contains large quantities of pus. Cystoscopy shows an inflamed bladder, and the right ureteral orifice is everted and surrounded by bullous edema, and on passing a catheter into the right ureter it meets with an impassible obstruction about 1½ centimeters above the orifice. The left ureter appears normal and the catheter passes up the pelvis of the kidney. The urine from the left side is clear and contains no pus, and the phthalein appears in 7 minutes, showing a normal kidney on the left side. The radiographic picture which I now show in the shadow-box, is of great interest, The left side shows a moderately enlarged kidney, but no calculus. The right kidney is not particularly enlarged, but there is a definite calculus present. There is another calculus in the lower ureter, an inch and a half above the bladder.

We have, then, by means of the radiograph and ureteral catheter, made a diagnosis of stone in the pelvis of the right kidney and an impacted stone in the lower ureter with a normal kidney on the left side.

The question is, what shall we do to relieve this man of his suffering?

My judgment would be to remove the calculus in the lower ureter by means of an incision parallel to Poupart's ligament, peeling back the peritoneum until the ureter is exposed, incising the ureter and removing the stone without opening the peritoneum, sewing up the incision, with drainage, and then turning the patient over, making an incision through the right flank, bring-

Pyelogram of lower portion right ureter showing Large calculus impacted near bladder. Left side normal and ureter catheter in place.

ing the kidneys up on the loin, making an incision into the pelvis of the kidney and removing the small stone in the pelvis of the kidney. If at the time of removing the stone from the pelvis of the kidney, the organ were found to be so disorganized that it would be of little use to the patient it would be safer for the patient to do a complete nephrectomy rather than permit a useless kidney which would be likely to suppurate, to remain in place; but I think we should give the man the chance of saving the right kidney for him if possible.

I have advised operation in his case and he is now considering it.

32 Schermerhorn Street.

Syndromes in Heart Disease

Louis Faugeres Bishop, A.M., M.D., Sc.D., F.A.C.P.,
New York.

It has occurred to me that it would be interesting to find out from various cardiologists what particular syndrome they had observed in their work in cardiology which they considered in a measure to be their own discovery and which had specially interested them. While it is hardly to be expected that any one would be so fortunate as to discover a syndrome of sufficient individuality and originality that his name should be associated with it as was the case in the Stokes-Adams syndrome, nevertheless, perhaps temporarily somebody may have credit for emphasizing some certain combination of symptoms and findings that may aid in the analysis of conditions.

Every physician's experience is founded by the unconscious recognition of certain syndromes which influence his diagnosis and treatment.

These syndromes correspond to the nature of the practice that a physician is called upon to do and the

Fig. 1.—Fluoroscope of a Typical Infantile Heart.

type of the disease of his time. At other times under different conditions the syndromes might not apply.

Imagine one cardiologist meeting another and saying "My favorite syndrome is the aortic heart with the Corrigan pulse and precordial pain." And then the other cardiologist might say "The syndrome that has interested me the most is mitral stenosis, complicated by parenchymatous nephritis" and so on.

The author would answer that his favorite syndrome at the moment is what he is pleased to call "Infantile Heart."

There is in fact this group of heart sufferers which has always been a puzzle to all who have thoroughly studied them. They are evidently cardiopathic but do not fall into the group of heart troubles resulting from infecti-

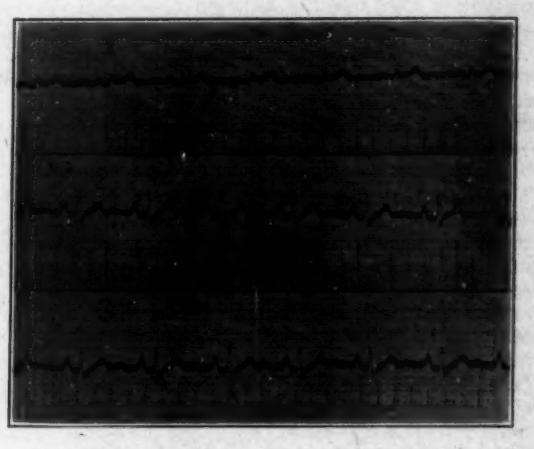

Fig. 2.—Electrocardiogram of a Typical Infantile Heart.

ous diseases nor do they present any very marked signs on auscultation and percussion except often a systotic murmur in the pulmonic area. However, when they are examined with the fluroscope and the electrocardiograph they show certain definite signs and on careful questioning they are found to have a definite history. In other words, out of the findings and the history a syndrome can be constructed that may well be named the "Infantile Heart."

The electrocardiogram shows right predominence and sinus arrhthymia of a degree out of proportion to the age of the person being examined. The fluroscope reveals slight prominence of the left border of the heart and blood vessel shadow in the region of the conus. The history is that of an individual who has never been quite able to keep up with companions in his childhood games, has had some consciousness of the heart and has been subject to attacks of palpitation.

A typical teleoroentgenogram and orthdiagram of the infantile heart syndrome is here shown.

109 East 61st Street.

The Whys and Why-Nots of Birth-Control

MAXIMILIAN P. E. GROSZMANN
New York.

The first American birth control conference was held in New York in November, 1921. Its object was to re-enforce the arguments brought forth in favor of a better knowledge of the science of controlling human procreation, and to abolish all laws which forbade the dissemination of such knowledge, ranking it legally with "obscenity." The conference was attended and sponsored by many physicians and other scientists and thinkers of high rank, by welfare workers, and prominent as well as intelligent men and women generally. It marked the crowning effort of Mrs. Margaret Sanger, who for years had been waging war against an old prejudice, at time suffering the fate of the pioneer, and of that group of women and men who had stood by her, or who had independently fought for the same principle.

Birth control is effected in two ways, either by the prevention of conception, or by abortion. Its practice has been tabooed by a hypocritical society, although it is well known that it is quite common among those who either have the knowledge or can command it by paying the price. Certain classes of society have been accused by, among others, the late Col. Theodore Roosevelt, of restricting the number of their offspring unduly, thus producing "race suicide," and that these "better classes" were therefore in danger of being soon outnumbered by the multiplication of the "lower classes" who allowed themselves to be blessed with large families.

It may not be generally known that there is a statute in the U. S. Criminal Code, Section 211, which prescribes a fine of $5,000 or imprisonment of not more than five years, or both, for any one using the mails to give advice for producing abortion or preventing conception. The New York State Law, an example of the laws in other states (although there is no uniformity), punishes a person giving such information or performing an "unlawful" abortion with similar, although lighter penalties. It is not always easy for a physician to prove that he has performed a "lawful" abortion, in spite of the fact that the New York law introduces this distinction. In general, a "lawful" abortion is one in which the child's life is sacrificed to save the mother. Rarely, if ever, does the law consider the eventuality of preventing a child to live whose life would be a misfortune to the child itself.

In both laws, however, the giving of information on the prevention of conception is denounced as a highly punishable offense, and ranked with "obscenity." Very justly says Dr. S. Adolphus Knopf of New York, in a footnote in his instructive pamphlet on "Birth Control":

> "According to the State Law, a 'lawful' abortion is permitted and not punishable, but to prevent such abortion, always more or less dangerous to life, is not permitted, and punishable by law. In all medical colleges careful instruction is given how to perform the 'lawful' operation . . . but concerning the advice to give, for example, to the poor tuberculous mother who has had her uterus emptied once, so that she may not be obliged to submit to such a 'lawful' operation again, our teachers of gynecology and our textbooks dare not say a word."

One of the objects of the birth control movement is therefore the abolition of these laws. They are pernicious as far as they are, or can be, carried out; foolish, in proportion to the measure of being a dead letter. And it may be said that not only those suffer whose limited pecuniary resources prevent them from obtaining proper information on the prevention of conception; but many a well-to-do mother suffers likewise whose physician himself is ignorant of the best scientific knowledge on the subject, owing to the absence of legalized teaching in the medical colleges, as denounced by Dr. Knopf. More than that: the science of contraceptives is by no means an exact science yet—there are no absolutely reliable methods of preventing conception, since the study of this problem has to be carried on behind closed doors, and is not available to open scientific discussion in the medical press, according to law.*

Among the opponents of birth control there are those who base their antagonism on moral grounds. I believe we are outgrowing the puritanical conception of morality, and are beginning to realize that sex is a basic and important element in human relationship and civilization. Methods of giving our young the right teaching in matters of sex and procreation are widely discussed and much hopeful progress has been made to liberate our children from the bondage of a sham modesty and of perverted ideas on sex and parenthood. We are learning that the procreation of human issue is a grave biological problem, the handling of which is reflected in the social and economic life of the commonwealth no more than in its spiritual and ethical life; that the problems of heredity and environment enter deeply into the sexual life of men and women, and that the future of the race depends in no small measure upon a better understanding of these fundamental life factors, so that every man, woman and child may appreciate the enormity of the forces which are at play in the function of parenthood. These forces are elemental, universal, cosmic. Rightly appreciated, these tremendous issues will be found to be very sacred things indeed, touching upon the deepest mainsprings of human emotions. They involve mysterious agencies, the riddle of life and of creative power in general, and are basic in our conceptions of the divine in nature.

Again, the objection is offered that prevention of conception defeats the purpose of marriage which is supposed to be the production of children. This objection is not tenable. Marriage, as such, is a distinctly human institution. It serves human purposes. Sex in the human is not merely a matter of physical attraction; it serves a higher design. Or rather: the union of the sexes in the human is not altogether in the interest of human procreation, of future generations. It serves also the purpose of strengthening the life energies of the contracting parties and of satisfying those emotional potencies which are fundamental in the manifestation of mental and social endeavor. Woman is to man much more than merely the womb-man, the mate who will bear his children; and man is to woman vastly more than one who can fertilize her for procreation

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Strangely nough, at the conference alluded to, there were those among the leaders of the movement for birth control who discouraged, to the point of factional friction, efforts for immediate action on the Federal law, or for strengthening the hands of the Postmaster-General who endeavored to induce Congress to bring about a revision of all laws which interfere with the freedom of the press or of opinion. These conservatives, if we may so call them, prefer to first tackle the state governments, and develop public opinion among the physicians and the intelligent public. Their reasoning is not quite clear and does not impress one as unchallengeably logical. Their main argument is that freedom of the mails for information of this kind would open up a wide field for quackery. If there is such a danger, it will exist even after the states, the doctors and the general public have been won over. Besides, the quackery which is rampant now, under the protection of secrecy, is perhaps much greater and much more dangerous than the traffic in quack contraceptives will be when the searchlight of publicity can be turned upon it, and when research in this field is open and unrestricted.—M. P. E. G.

and be the father of her children. The feminine psyche is as much a counterpart of the male psyche as is the female body a counterpart of the male body. Even bodily speaking, affection, the basis of true marriage, embraces emotional elements which are by no means confined to procreative ends. His woman will make man a better and fuller man than he would be otherwise, and her man will make woman a better and fuller woman. An eminent English divine, the Rt. Rev. H. Russell Wakefield, D.D., Bishop of Birmingham, president of the Council of Public Morals, expressed himself as follows:

". . . The procreation of children (is) not the only object of matrimony. . . . Had not the sexual association of married people a spiritual meaning which must be placed first in all definitions of it? It was surely the culminating expression of the love of the two who have become one flesh. It brought with it the creation of a child which was the combination of the two natures, but it need not be an imperfect union if on occasion, for high and pure motives, there was a sacrifice of this particular result of married love."

Although it can be cheerfully conceded that the glory of parenthood brings the greatest happiness to well-mated couples, there are many reasons and conditions which would justify the prevention of procreation in spite of true married love. This married love itself would often be a justification of the omission of parental functions, as every physician and every student of human nature knows.

It has been argued that a general knowledge of contraceptive methods would encourage those who refuse maternity, or paternity, for reasons of mere convenience, or "laziness." There are cases of this type, no doubt, and there will always be. On the other hand, there are many women who are physically or emotionally unfit to be mothers, and men who are unqualified for fatherhood, for other reasons than mere indolence or self-gratification. There are reasons of temperament and of character. Some do not love children—there are women of this type in spite of all protestations to the contrary. It is not true that every woman is a natural-born mother, or every man a predestined father. To those individuals who care not for progeny, the arrival of a child is an unpleasant accident, and the child itself a very unwelcome addition to the married state.

Should we not consider the interests of the child? Is it a good thing for a child to arrive in a home which has no welcome for it, which will never be its home in the best sense of the word? Can we not picture to ourselves the future of a child growing up under such conditions? Will not its earliest impressions warp its personality? Will it not reach maturity, if it ever does, with a starved soul if not with an impaired body?

It is a well-known fact that parents of this type will resort to ill-advised methods of abortion, in only too many cases. Their knowledge of the problem is scanty, often erroneous, and it is difficult, even illegal, to search for illumination. Crude methods of abortion, as practised illegally by midwives, or handed down by equally ill-informed mothers and grandmothers, will, even if successful, frequently injure the unwilling mother's physical and mental health. But often enough they are not successful. Then, the unwelcome child which is born into the world, arrives in many cases a badly damaged article. Those of us who have studied the causes of handicapped development in children know that the unfortunate child is often one which just happened to be born, surviving efforts to get rid of it. Here again, the interests of the child itself are at stake. In other cases, the child is still-born.

Moralists may admit all this and yet insist on their opposition to methods of contraception. Their argument is that the proper prevention of conception is through self-control and continence—in truth, through unsexing one's self, so to speak. It is perfectly correct to advise self-control in bridling one's sex appetite precisely as all other instincts must be brought under the conscious direction of the intelligence and the will. We must learn to strengthen our powers of inhibition; thereupon rests progressive civilization.

But it is another matter to restrict the emotional and physical elements of our nature to the point of annihilation. There is a difference between use and abuse, between temperance and elimination, or prohibition. A natural sex life is as essential to every human being of normal functions as is the exercise of every other normal function. This is true of the male sex no more than of the female sex. When there is good reason of one kind or another for the prevention of conception, for the avoidance of child birth, it is wrong to suggest the killing off of the sexual instinct in a married couple. Repressions of this kind are apt to work great havoc in the psychic mechanism and equilibrium, as well as in the metabolic processes of the body life in general. They often lead, and have led, to mental disease and moral derailment.

In other cases, with the male sex, the desire to avoid "accidents" in the family has suggested recourse to the institution of prostitution, with all its risks, physical and moral. It may be said, with a great degree of probability, that the "social evil" will lose much of its age-old hold on the human race when once proper knowledge of rational birth control is disseminated.

In this connection it may be noteworthy that nearly twice as many married males and females commit suicide as do single ones, according to a statement by Dr. Charles Norris, Chief Medical Inspector of the City of New York. Again, it may be maintained that many of the divorces, the alarming increase of which has perturbed the minds of many, can be traced to an unhappy sex life of the dissenting parties. Might it not be expected that even in this respect a clearer knowledge of birth control on the part of sexually tensed mates would bring relief to some extent? "In the past twenty years, one-twentieth of the population of the United States has been involved in divorces," declared recently C. C. Carstens, national director of the Child Welfare League of America. "The child is generally merely a pawn on the chessboard and is given little consideration in most divorces," he continued. "The total number concerned in these divorce cases has been 5,335,000 men, women and children."

One of the strong arguments used by those who base their opposition to birth control on religious grounds is that it tends to destroy life. Life is sacred, they maintain, and an interference with life, even unborn life, is an interference with the laws of nature and of nature's God.

This argument is applicable only to abortion. The destruction of the germ, as soon as the female ovum is fertilized by the male spermatozoon, means indeed the killing of a new individual, embryonic though it may be. We may agree that abortion should not be practiced except in cases of absolute necessity, when the best judgment of an attending physician decides in its favor. Indiscriminate abortion is truly criminal. Yet, if we wish to militate against the illegal practice of abortion, we must place married people in the position to avoid conception, so that abortion, in cases when child

birth is contra-indicated or unwelcome, becomes unnecessary.

Contraceptive measures do not kill human life. Too much misinformation in matters sexual it rampant, or the argument against contraception would not be stressed, by way of religious sentiment. Dr. John C. Vaughan, of New York, in his address before the Birth Control Conference, stated the case very plainly when he mentioned the fact, well known to all biologists, that each human ovary contains about 50,000 ova, each woman then being the "potential" mother of 100,000 children; of male spermatozoa there are countless billions in the system of every man. Each coitus liberates a host of these spermatozoa which attack a single female ovum, only one of them having really a chance of fertilizing it. This is parallel to the case of the drones in a beehive, of which there are many, and only one of which will be elected by the queen bee to become the father of her brood. Nature is equally abundant in the procreation of all other representatives of sexual reproduction; millions of eggs and prodigious masses of spawn are destroyed before they ever have a chance of creating new beings.

An unfertilized ovum is as useless as is a spermatozoon which does not unite with an ovum. Both are merely single cells. Even in the most fertile family, when the mother brings forth a baby every other year, the new human beings actually created are numerically so utterly out of proportion to the number of wasted generative cells of both sexes that contraceptive measures may be considered as very puny efforts of man to compete with the colassal destructiveness of Nature herself.

A point which was brought out by Dr. Lydia Allen de Vilbiss, of Washington, D. C., at the conference, is well worth mentioning. She pointed out that studies of measures for birth control are not necessarily negative in their purpose and results. They will also lead to investigations of the causes of sterility which is a source of great unhappiness to married couples who really desire offspring.

In their arguments for the general acceptance of the principle of birth control its advocates were, and are, not always very fortunate. Two main arguments, the very ones which require much qualification, are these: Birth control, as a restrictive measure, will prevent over-population; and it will, or should be, utilized for the purpose of breeding better types of humanity, and restricting the breeding of lower ones. In connection with the first argument, there were papers read at this conference on the population question as illustrated by Asia, especially Japan, China, and India, in its bearing on war and international relations, on national prosperity, security and peace, etc. The eugenic aspect was stressed by quite a number of addresses and really was the backbone of the entire conference, interwoven as it was with the economic aspect.

Yet, these are the weakest arguments that can be mobilized against the forces of pseudo-science and shammorality, at least in the form in which they were presented.

Speaking of what he called the over-population in Japan, Dr. Lothrop Stoddard, of Brookline, Mass., author of the much-discussed book, "The Rising Tide of Color," endeavored to show that the overflowing multitudes of the Japanese isles were an immediate threat of war. He generalized this idea by maintaining that over-population in all Asiatic countries was a great menace. It would seem difficult to define what constitutes over-population. Albert Galloway Keller, in his book, "Societal Evolution," makes a clear distinction between animal and human over-population. When animal numbers reach the "saturation point" of resources, there is, he thinks, no immediate recourse but flight, or a merciless weeding out of the surplus weaker individuals through natural selection, unless they acquire some form of structural adaptation. "But in the case of man, the entrance of the factor of rapid mental variation, and of selection from variations, brings it about that both flight and slow painful adaptation are usually eliminated, and an advance in the arts of life (the external projection of mental adaptations) enables him to extract more from the environment; that is, to extend the limit of its supporting power."

Even he, however, mentions war, pestilence, and famine among the factors which nature employs to bring about a proper balance; and he also recommends, by implication, restriction of births. The "natural" checks just mentioned were much emphasized by some of the speakers at the Conference. We might conclude that it was in the minds of these speakers to welcome, in a measure at least, war, pestilence and famine as forms of relief, as long as the restriction of births cannot be accomplished. It will possibly require another thousand years before the new gospel will penetrate the masses of Asia, so the aims of the Disarmament Conference in Washington and the dreams of the pacifists may be thought rather premature. More than that: the Christian doctrine to help the weak and to raise the fallen, and all modern methods of social relief and welfare, may have to be condemned as out of place in a well-governed world, which is so organized that the "saturation point" of population is never reached. As a matter of fact, this thought was not without expression at the conference.

The movement for limitation of the population was really started over a century ago by Rev. Robert Malthus, but it was only in 1818 that the idea of scientific prevention of conception dawned upon research and welfare workers. It is plain that such prevention of conception is a far better method of caution whenever caution is needed, than either abortion or infanticide, the two curses of innumerable centuries in the past. Malthus knew nothing of methods of prevention except continence. The Malthusian theory maintained for the first time, perhaps, that there is such a thing as over-population, that is to say, the danger of starvation for the multitudes when the number of people exceeds a figure which could be easily supported by the resources at hand.

This theory found many adherents in Europe, and also in this country. It seemed self-evident. Yet, there were also many voices raised against it. As a matter of fact, if we compare the numbers of people living in any country at Malthus's time with those living in the same countries now, we may have to admit that his worst fears have not been realized. Living conditions in the present century can hardly be called worse than those in the last; we may even claim that living conditions have been steadily improved. For with the progress of the race, with the eventual congestion occurring at certain centers of population, there has been going hand in hand an increasingly successful conquest of nature, through science, and the means of subsistence have been multiplied.

In a recent address before the Chicago Section of the American Chemical Society, Mr. C. H. McDowell contrasted the fertilizer situation in this country with that in Germany, referring to the explosion of the huge

chemical works at Oppau, where the Germans made fertilizers through the fixation of atmospheric nitrogen. Fifteen times as large as Germany, the United States, he pointed out, produces only the same amount of barley and not quite twice as much oats. Germany produces six times as many potatoes and twelve times as much rice as we do. He accuses this country as being very wasteful.

The *Century Dictionary* quotes from the *American Anthropologist*, I, 11:

"In countries of the highest civilization which has yet been reached, armed with the resources of the best government, purest justice, truest morality, soundest economy, and most fruitful science attained by men, we find the greatest density of population, because the limits of population revolve more and more within the sphere of man's material, mental and moral freedom."

This is a very significant statement, one which throws a flood of light upon the real problem of population.

As long as we have enormous latifundia in the possession of a few large land-owners, in any country, in contrast with crowded tenements; as long as apples in the western states of America are allowed to rot in the orchards, and wheat is used as fuel, because of the inadequacy of transportation, while the high cost of living in other parts of the same country impoverishes many thousands: so long we have no right to speak of over-population. And, speaking of the millions of Asiatics who are supposed to be threatening "white" civilization: there are millions of acres of untilled land in Asia itself, in Australia, in Polynesia, not suitable for "white" populations, to which the overflow elsewhere may be diverted. What we need here is an international understanding on an anthropological basis, and it might not be outside the province of a Disarmament Conference, or a League of Nations, to discuss ways and means to bring about such a movement.

Even though this course may be said to be only palliative, or bringing temporary relief, at best, we may point back to the statement quoted above from the *American Anthropologist*—when once we shall have reached a state of real civilization, there will be no need of fear. Problems like these must be discussed internationally, not on the basis of national politics and selfish interests, but in a scientific, no less than a humane, spirit.

We might discuss the argument of economic pressure in the same manner. It is directed against the large families of the poorer classes, in the first instance. Now, nobody can deny that there are many, too many children who ought never to have been born, who are growing up in squalor, misery, poverty, crime and degradation, whose lives were warped and cursed from the moment of their conception. Not a few die within the first year of their lives, others succumb later in childhood. Those who survive fill the gutters, the haunts of the underworld, the poor-houses, the lunatic asylums, and public institutions of all kinds. They constitute a menace to themselves and to society. Again, the mothers of these, having borne far more than their quota of human flotsam and jetsam, are disspirited, washed-out, depleted women, a tragic perversion of the glory of womanhood and motherhood.

All this is true, and one who sees the swarming multitudes of urchins in the tenement districts of any large city may be aroused to pity and remonstrance.

But here again, we have to point out the fact that these conditions, sad as they are, can be remedied by other factors than birth control only. Many thousands of these children, apparently destined to fall by the wayside, can be developed into true manhood and womanhood. It is again a matter of building up a real civilization, "with the resources of the best government, purest justice, truest morality, soundest economy, and most fruitful science attained by men."

To argue, on principle, against large families, is futile and ill-advised. We may caution against indiscriminate breeding when there is physical or mental unfitness, or when there is such economic pressure that children cannot be raised humanly in the environment into which they are born. Yet we must also realize that there are thousands of lowly families with a large number of perfectly healthy, normal, sane and promising children, strapping boys and fine girls. Examples are not infrequent when the very last born of such a happy brood have made their mark in the world.

It has been shown that the two-children system, practised in France for decades, and in the "best families" of our own country to some extent, is disastrous. It is difficult to agree with Dr. Knopf, previously quoted, when he argues that Germany, with her high birth rate, produced a weaker race than France, with her low birth rate, and that France produced "not as many, but better soldiers which withstood the onslaughts of the enemy's hordes" in the last war. France, in fact, was reported by her own statistics as being "bled white," and there were many other factors entering into the defeat of Germany.

With only two children in the family, a race would soon die out. There must be a minimum average of four to maintain a race on a stationary level. Only when the average exceeds four can we say the race is gaining in number.

If, then, we care to encourage the breeding of a resistant race, we ought to encourage the production of a sufficient number of children to meet these conditions. The so-called "upper classes" of "society" are quite derelict in their duties towards the race in this respect.

The fear, so often expressed, is that the "lower classes" with their high birth rate will soon crowd out the "better stock" with its lower birth rate. One may believe in the virtue of propagating "good stock" without accepting the dictum that the economically unfortunate represent, on account of the very fact of their low economic standing, an inferior type. But this is indeed the claim of a class of psychologists and social workers who have "tested" the "intelligence" of the "lower classes" and found them wanting. They are contrasted with the successful classes which are called the "fit," as being largely "unfit," or at least predestined by general endowments and heredity always to remain submerged.

It was refreshing to listen to Dr. Abraham Myerson's address, delivered during the conference, on "The Inheritance of Mental Disease." Dr. Myerson is connected with the City Hospital and the Psychopathic Hospital of Boston, and knows what he is talking about.

He pointed out that we ought not to speak of "insanity," "feeblemindedness," and "criminality," as if they represented units, or entities, clearly defined. These terms embrace a great number of various symptoms and conditions which cannot be summarized. We ought to talk rather of different "mental diseases," just as we speak of other diseases. He raised the question: Who is fit? and resented it that the educated class, or the successful class would style themselves fit, while they would call the "feeble-minded" laborer (so labeled, or libeled, by the application of artificial standards of measurement) unfit. This laborer is, after all, he claimed, the backbone of civilization. He furthermore showed that there are two classes of mental diseases, only one of which can be said to run in families, or be inherited.

The other and larger class represents accidental diseases just as are small-pox or a broken arm. The mental diseases which we may call "hereditary" are the "functional" ones, so denominated because we do not really know much about them, except symptomatically. But even these cannot be said to run through more than a few generations of a family, mostly only two, perhaps four. This would show that many of the family charts which have been constructed by genetic research workers to show "degenerate stock," cannot be accepted on their face value.

Be that as it may—even if we agree with the views of those who insist that there is a degenerate type which ought to be eliminated from human society, by preventing its procreation: we may have to admit that the problem of feeble-mindedness and crime has been much exaggerated. With the progress of social research and social betterment, with the advance of medical and psychologic science, many of these types will disappear. They are as much a result of our ignorance and undeveloped social organization as they are of heredity and "poor stock." We may encourage the breeding of children under normal conditions of physical and mental health, and recommend birth control where there is plain evidence of its need. But the "unfit" will largely disappear in proportion to our raising the general level of human life.

Even without stressing the weaker arguments for birth control, those just discussed, there are sufficient reasons, as shown in the earlier paragraphs, for considering it a very valuable eugenic measure. In its essence, it is an individual matter. It must be adjusted to individual needs and conditions.

The point under debate is now rather: how can we bring this message to those who need it most? There is the necessity of a vigorous campaign for the abolition of prohibitory laws which make the scientific study of this problem and its open discussion, and the dissemination of recognized facts, impossible. Then, when this is accomplished, we must enlist the co-operation of every physician, educator, social worker and public official to bring the message to those to whom it will be a gospel of salvation. Meanwhile we must, each one in his own sphere, do the best we can.

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The Growth of the Human Mind

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It is a well-known fact that the discovery of evolution revolutionized human thought, transformed the science of living things, and furnished mankind with the keys which lead to the knowledge and control of nature. The discussion of any subject is now incomplete without reference to its evolutionary aspects. In attempting to outline the growth of the human mind, whatever the nature of mind may be, it has developed at an equal pace with the material organism. Whether we consider it in the slow advance from infancy to maturity or in its growth through the cultural strata of a single city or in the uneven levels of different races, it is interpreted more easily by means of the law of evolution. To properly define mind is most difficult; we are always hindered by lack of proper definitions, but may we not without serious error assume mind to be the sum total of conscious states? This leads us into the realms of psycholoy which deals with states of consciousness and also into a consideration of the physiology and anatomy of the brain.

Physicians are constantly dealing with both normal and abnormal mental states and it behooves us to have some scientific insight into the workings of the human mind, so that the treatment of our patients may meet with unqualified success. It is most difficult to attempt to crystalize into a few paragraphs the results of that scientific thought which may be of value to us, and for that reason the writer makes no apologies. If the article will stimulate scientific thought along these lines and call to mind the intimate relations between brain and body, its object will have been accomplished.

Medical men are fairly well acquainted with the anatomical structure of the brain and cord. The psychologist has described to us the aspects of normal behavior and the psychiatrist has described in scientific terms the story of abnormal behavior.

Let us briefly review the anatomy and physiology of the human brain and cord. Prof. Loeb regards nerve tissue as merely conducting tissue, and his colleague, Dr. Matthews, claims to have shown by experiment, that nerve tissue consists of highly phosphorized fats in a weak, salty solution. They tell us that any stimulus applied to a nerve causes a rapid series of chemical changes and precipitations, in which the negative charges of the atoms are released all along the line until the muscle is reached and stimulated. On this theory the essential function of the nerve is to supply a series of ions or atoms, charged with electricity, by which the stimulus may be telegraphed, as it were, to the pertinent muscle. Advance in nervous organization consists in the provision of efficient paths from the sense area to the muscle, and in the co-ordination of the responding muscles. All experiments serve to illustrate the mechanical nature of the organism and in connection with this, let us remember the six important functions of cells, namely, nutrition, reproduction, contractility, irritability, conductivity and co-ordination. Anatomically, we recollect that the entire nervous system has two divisions, peripheral and central; the peripheral including all nervous elements outside the brain and cord, consisting of thirty-one pairs of spinal nerves originating in the cord and diffused to all parts of the body, and twelve pairs of cranial nerves ("O. O. M. P. T. A. F. A. G. P. S. H.") originating in the brain, but reaching the surface of the body directly and without passing down the cord. These include the nerves of taste, smell, hearing, sight, oculo-motor, facial, trifacial and vagus which controls the heart.

The central nervous system is naturally divided into brain and cord. The spinal cord, as we will remember, is a cylindrical prolongation of the central nervous mass, is composed of nerve cells, collections of nerve cells called ganglia, and nerve fibres. This cord occupies about two-thirds of the length of the spinal canal and is divided into several distinct tracts, each being the highway of certain nerves running to and from the brain. The important divisions of the brain are the cerebrum or large brain with its two hemispheres, the cerebellum or small brain and the medulla oblongata or first enlargement of the cord. "Now the cerebrum, or large

brain, is characterized by a gray appearance due to a larger proportion of ganglion cells than fibres; it is the seat of the special senses; it receives, records and reproduces for purposes of judgment the various impressions; it is the instrument of the will, the source of the higher emotions and feelings and is the storehouse of memory and imagination."[1] A peculiar feature exists in regard to the number of nerve cells which are found in the cerebrum; they are all present before birth and no new cells will be formed during the life-time of the individual. They grow from birth on by enlargement of cells and the prolongation of fibres.

The spinal cord, beside transmitting the nervous discharges to and from the brain, is a great storehouse of nerve batteries and these are the centers of reflex action. Most of us will remember the experiment in which the frog's brain was destroyed but responded to external stimulus. The medulla is a solid network of fibres and its functions are conduction and reflex action, especially respiration. The cerebellum is concerned in the coordination of muscular movements and the preservation of equilibrium. We have good reason to believe that the cortext of the brain, which is especially developed in man, is particularly concerned in consciousness. Our knowledge of it is slender but it is estimated to contain over one million cells. Recent discoveries have only increased the wonder and potentiality of the cortex. Each atom has proved to be a remarkable constellation of electrons, a colossal reservoir of energy.

It is evident that we came into the world with many performed adjustments of the nervous system, ready to respond in a definite way to certain outside conditions; this is called by some, "instinct," and we find instinctive action to be independent of experience. The supreme ideal of science is to unify and it is very characteristic of modern research to discover hidden connections between the most divergent realities. For instance, ether and matter were until a few years ago said to be of different orders but now are considered to be of the same order. "Investigation grows more difficult when we realize that mind leaves no fossil impressions in the soil, not, at least, until the mind of man begins to embody its ideas in rough industry. Most anthropologists agree that man was evolved in the Tertiary period, but are by no means agreed that we find positive remains or traces of man in the Tertiary. The first indisputable trace of something above the level of the anthropoid ape is found in the late Pliocene, or early Pleistocene period. The famous bones of the ape-man (Pithecanthropus Erectus) show that some anthropoid ape had, by the end of the Pliocene or the beginning of ehe Quarternary period, reached a level that most authorities recognize as just human, and other authorities —happily for the law of evolution—declare to be just less than human."[2]

The question of the origin of our universe involves the investigation of a number of theories, namely, its origin from gaseous nebula, from meteorites and from cosmic dust. Whatever physical processes may have been involved in shaping the earth itself, they have had a too profound and too little appreciated effect on the development of the mind. Mind, as we see it to-day, has been many centuries in developing. We may trace its growth in and from the simple cell to the more complex structure as seen to-day in man. Prof. Keith, in his "Antiquity of Man," believes that "Modern man, with large brain, was on the earth contemporaneously with Neanderthal man." We must bear in mind that man is an animal and to a great extent is still an animal in mind and body. His essential desires are animal, such as hunger, thirst, the urgence of sleep and sexual longing. Learning among animals in a lower stage than man is individual, not collective or cumulative, but all higher animals including man, exhibit curiosity under certain conditions, and it is this tendency to curiosity which underlies all human science. "Every age has contributed its particular part to the making of the mind and to our current intellectual heritage. Prof. Robinson points out four foundations of our modern mind which he calls, "the animal mind, the child mind, the savage mind and the traditional civilized mind." Of course, we recognize that the earlier chapters of life have been irretrievably lost and that we cannot, from search in the fossil archives of the living family, obtain even the remotest indication of the nature of its first representatives, but compelling evidence leads us to believe that at one time man lived both speechless and naked and ate raw friut, berries, insects, roots and such animals as he was able to kill. He was ever contending with the forces of nature, with the wild beasts of the forest, with members of his own species outside his clan, and in this long and varied struggle his intelligence developed, language improved and his discovery of fire and its uses placed him in a still higher state. Man is an animal, and if intelligence is a generalized term for the capacities of perception, judgment and reason, it is at least found in the higher mammals. All our intellectual life has at its base our animal body and our animal ancestry. "No morphologist will question that the Tertiary precursors of man passed through a simian stage. The great group of the ordinary Old and New World apes diverged somewhat early from the ascending stem; the anthropoid apes long remain in close association with the ancestors of man. One of the most delicate and recent tests of genetic relationship has fully confirmed this view. It is found that the serum of one animal's blood has a destructive action on the cells of another animal's blood, in proportion to the distance in affinity between the two species. An application of this test to the blood of man and the four anthropoid apes proved that the affinity between them was just as close as has been assumed."[3]

We can safely say that mind has been of slow growth and can be fairly traced from the simple cell to the more complex organism of the mammal brain. It is the story of the development of the nerve cell, its functions and structure. Geologic changes in the structure of the earth necessitates changes in those forms of life which corresponded to the various periods. In order to survive, the organism must adapt itself to its environment, so the collection of protoplasmic cells began to specialize and divide up the labor necessary to support itself. One set of cells specialized in digestion, another on generation and an outer layer developed for purposes of locomotion and sensitiveness. In the lower forms of animal life, we can grant no agency distinct from the animal's neuro-muscular mechanism and until the cerebral cortext is formed we cannot admit of what we call conscious states. What is most material to observe, is the fact that each conscious process has a corresponding physical or neural process. Assuming that the term mind may fitly be applied to what are called "psychic" activities of the lowest organisms, modern research has shown that it is a general property of living matter, whether plant or animal, when it has freedom of movement, and whatever this psychic quality may be, it is a common property of living plasm and not an exclusive property of the animal. The real distinction between plant is related, not to any mystical quality, but to a simple physical difference; the one has fixed itself to the soil and the other has developed locomotion. As we have said before, advance in organ-

ization means the evolving of mechanisms by which the animal or organism may better adapt and adjust ieself to its environment. So we find the development of distinct sense cells which cause the organism to be all the more effective and we can conceive of the evolvement of a highly adaptive neuro-muscular mechanism which would discharge the "psychic" functions of the lower forms of life.

Years ago Prof. Tyndall anticipated modern science when he said that "materialism was that doctrine which holds that matter contains the promise and potency of every form and quality of life." Physicists now regard ether as the one fundamental reality of the material universe. May we not logically say that the ether contains all the promise and potency of every form and quality of life, including mind? We look for our first traces of mind in spontaneous movement and responsive movement to stimulation and the biologist aids us by pointing out that if we would study mind in its simplest expression, that we must turn to the simplest forms of life which we find in nature to-day. The most simple form of life as seen in the uni-cellular organisms (which consist of the cell, nucleous and protoplasm) is the definite way in which the cell responds to various external stimuli. This response appears to be neuro-chemical in character and we know the cell to be a chemical machine of the most extraordinary complexity. Sir Oliver Lodge, an eminent English physicist, has described carbon and water as the keys to the chemistry of living matter, and Pflüger and Verwon have worked out a theory that a radicle of cyanogen is the essential element in living matter. These cells are capable of forming new associations which will lead to a modification of the inherited activity, and the nervous machinery of these cells are capable of discharging its functions without consciousness.

Step by step we can trace the development of the single cell into a higher and more complex organism. The nerve cells increase in number, gather themselves together into a line, thicken at one end (which eventually will develop into a brain); in fact, the first stage of mind development, as we have said before, is a direct response to irritation, then comes the development of an area to receive the irritation more intensely and the formation of a line or path to conduct it to the responding muscle. In the last stage the lines or paths intersect in a central brain the impressions received are associated, and more complex stimuli issue to the muscles. Intermediate regions arise between the receptive centers in the brain in which these associations occur. In the instinctive act the stimulus goes straight to its destination because a straight path for it is inherited. As the association areas grow, the stimulus is arrested by recorded stimuli, the instinctive action is inhibited or modified and the organism begins to learn by experience. "As the sensory areas grow finer and more discriminative, the instinctive response must slacken. The organism acts more and more discriminately in harmony with each situation. As the areas of association enlarge and develop, more and more remote associations are liable to occur and the organism begins to reason." Mental states are the consciousness of these increasingly elaborate nerve processes. Reason, in particular, is the consciousness of the more remote associations of incoming and recorded stimuli. It begins in the higher mammals, develops in the lower primates and is carried to a high pitch in the superior primate. This story is extremely condensed. One can find in scientific books the full details showing how these conclusions are reached.

Two theories in regard to mind are always present, one from an ecclesiastic point of view, that mind is an unique reality, inalterably distinct and remote in nature from the reality which we call matter, and a scientific theory that mind is not a separate reality, but a different aspect of the same reality. But theological conceptions of matter no longer interest the scientist who bases his opinions on verified facts obtained by repeated experiment and not on metaphysical speculations which have little or no value. Aside from ether and its products, science can find no new reality in the story of life. The evolution of the nervous system is admitted; and we must always remember that *the world of conscious states assuredly has a corresponding world of nervous states which is purely material.*

Keeping before us the growth of mind from the simple cell up to the more complex organism and having following it in its evolution through the various geological layers, let us glance at the growth of mind in the human being. *Most of our ideas are the result of hereditary influences, environment and education.* "Our most important opinions, however, such as those having to do with traditional religious and moral convictions, property rights, patriotism and all assumed foundations of society, are rarely the result of reasoned conviction or consideration, but of unthinking absorption from the social environment in which we live."[4] The first views presented to us on these form long and lasting impressions and are liable to be the ones which will remain through life, especially if the environment remain the same. The first impresions made on our brain leave a furrow or tract, as it were, on new soil, over which subsequent impressions of the same kind pass easily. Let the impression be given by a teacher or loved one in the home or at the church, and the emotion of love associated with the idea. It is then doubly hard to get rid of or even modify the idea for when an idea is associated with the emotions and the emotions allowed to dominate belief, our reason departs. The secret of the success of the fetish-man, of the spiritual medium, of the witch, wizard, magician and priest, is that the exercise of the reasoning faculty is hindered and often altogether suspended by emotion. We have a great stock of scientific knowledge unknown to our grandfathers, yet the mind of the masses has been slow in advancing and the process of emancipating natural science from current prejudice has been long and painful.

Intellectual freedom has been in conflict against tradition, ignorance, and vested interests in church and university, and those who cried out against scientific discoveries, did so in the name of God. In order for the human mind to make any progress at the present time, it is necessary that we should give our fundamental beliefs and opinions a most critical and searching examination, *retaining what is true and rejecting what is false.*

The masses should be taught, in so far as possible, some of the essentials of the natural sciences, for in so far as man has learned the truth about natural phenomena, he has been able to conquer and harness the dynamic forces of nature for his own benefit and advancement.

"To consider the normal aspects of primitive life, as we see them in savage communities and trace them in early literaeure, is to realize the enormous hinderance offered to critical thinking in the primary stages of culture by the mere force of habit. The savage did not go through life with the idea of gathering more knowledge and framing better laws than his fathers. On the contrary, his tendency is to consider his ancestors as having handed down to him the perfection of wisdom,

which it would be impiety to make the least alteration in. Hence among the lower races there is obstinate resistance to the most desirable reforms, and progress can only force its way with slowness and difficulty."[8] *The reliance on authority is a fundamental primitive trait.* Modern science teaches us to rely on authority, only in so far as that authority gives us *facts, which are verified by evidence gained from repeated experiment.*

The same mental conditions exist to-day and many of our present religious and moral systems have their roots in the same ground as that of primitive man, and savage ideas, customs and conventional sentiments still continue to form a part of our own culture. The dream has had its great influence in the building of the mind. Our ideas, especially our religions ones, might have had another history had men been dreamless. These visions of the night led to the imagination of souls and doubles, as did his shadow and his reflection in the water.

It took a long time for the human mind to dispel the idea of a flat earth and to rid itself of the idea that the sun went around the earth. All ages have regarded heresy or disbelief of current opinions to be a crime, and wars, persecution and bloodshed resulted. New methods of transportation and inventions have been the means of great progress of the mind. The various uses of electricity, the steam and gas engine, revolutionizing the means of transportation, the telescope and microscope, bringing to the human eve both large and small objects, the invention of printing, have all played a most important part in mind development.

Transportation carried persons, things and ideas; it led to the friction of intelligence, the contact of minds all over the globe, and out of that has come whatever of forward movement the mind has made. Modern science, repersented in part by astronomy, chemistry, biology, geology and physics, has sapped the bases of those systems which have hindered the growth of the human mind and is proving to be the real and only saviour of the human race.

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CONSTIPATION.

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The word constipation is derived from con*stip*are, to crush tight together. Rather far fetched, but medical nomenclature is fearfully and wonderfully made. However, the word constipation which is here to stay, means the postponement of the action of the bowels beyond the usual time. The usual time may be daily or once in two or three days. We use the term chronic constipation when the waste material—the feces—fails to excite the desire to be evacuated, when retained in the rectum, the sigmoid or the caput cecum coli, as the case may be. That constipation of itself is not a disease is the evident reason why neither physician nor patient assigns to it the consideration it deserves. Perhaps the bowels should and would move daily if the individual could be made to understand the necessity for it and the consequences of the disturbance to the digestion, the hemorrhoidal vessels, the absorption of poison, the discomfort, and the long list of abnormal conditions which follow as the result of retained feces.

When the mother whose duty it is, fails through ignorance or carelessness, to teach the child the importance of having the bowels move daily, it behooves the family physician to supply the important information. Many an educated mother, anxious about the child's habits, fails to realize the importance of teaching the necessity of daily bowel evacuation.

The great majority of people eat three meals daily and the evacuation of the bowels is the finishing of digestion. It is reasonable and natural, and the bowels should evacuate their contents daily. The feces is the residuum of the three meals. When the food reaches the stomach it is forced by peristalic action of the muscular coats through the digestive tract to the lower part of the large intestine by which time the nutriment contained in the food should be digested and absorbed. This residue is the feces, which is or should be, propelled into the rectum and should excite the desire to defecate. The defecation is achieved by the relaxation of the sphincter ani muscles, peristaltic action and the contraction of the abdominal muscles.

Etiology

The surgical cases of constipation are not considered here, such as cancer, etc. The causes of constipation are many—habits, idiosyncrasy, lack of exercise, quantity and quality of food, atony of abdominal muscles, abnormal sigmoid, laceration of perineum, anemia, toilet seat too high (it should not be more than 8 or 10 inches), hysteria, neurasthenia, displacement of uterus, pressure from tumors, etc. The treatment in every case of constipation is to treat the patient. Examine the patient carefully. Find whether the feces is lodged in the rectum, sigmoid or caput cecum coli. If there is laceration of the perineum, there is probably rupture of the levator ani fibres, in which cases the fecal accumulation is in the rectum, the straining and forcing failed to remove the fecal mass, as the force resulted in the eversion of the vaginal outlet. It is an easy matter to prescribe a cathartic, but it requires care, experience and wisdom to overcome a chronic constipation without medicine and is not always possible. The patient probably has been taking cathartics. There are said to be 45,000 patent medicines on the market and a large percent of them are cathartics.

I was once called to remove an abdominal tumor and found a large tumor in the neighborhood of the cecum. The examination gave a doughy inelastic feeling to the mass. I suggested two ounces of castor oil and that I would see the case the next day, by which time the oil had operated and the tumor had disappeared. The same doughy feeling is produced when the fecal matter is lodged in the sigmoid. The patient may consult the physician for headache or dizziness or palpitation or indigestion, loss of appetite, furred tongue, etc., and have taken many headache remedies. Examination may reveal kidney or other disease.

As a rule the bowels should be evacuated once daily, unless it is found that from idiosyncrasy or well-established habit the bowels move normally every second day. If the act is carried out without straining, the patient is in good health; it is wisdom not to interfere.

There are very few cases of constipation that cannot be overcome without medicine. It requires great firmness on the part of the physician in giving his instruction and perserverance on the patient's part. The phy-

sician must insist upon the patient giving the sluggish bowels plenty of time. In case of no movement, the patient must go to the closet at same time next day. Habit is second nature and it is mostly for lack of habit that constipation is established.

Food is an important matter. When the patient is addicted to coffee or tea, both must be given up until the constipation is overcome. If a great meat eater, meat once per day and sparingly should be insisted upon. A glass or two of hot or cold water before breakfast and the same at bedtime is advisable. I suggest the following as a suitable menu:

Breakfast.—Cereals, stewed prunes, fruit, brown, bran, corn, whole wheat or graham bread with honey or molasses and plenty of butter. Milk, butter milk, malted milk, water, syphon water.

Lunch.—Bread and milk, or rice and milk. Eggs any style, salads, plenty of oil, baked apples, berries. Beverages same as breakfast.

Dinner.—Choice of soup. Choice of fish or meat. Celery, asparagus, potatoes, vegetables, adlibitum salads, plenty of oil, nuts, raisins, fruit, berries, simple preserves prune puddings oranges, etc.

Before the days of preventive medicine, Nelson in his report to the Admiralty wrote, "You will agree with me that it is easier to keep men well than for physicians to cure them." When our medical schools establish a chair of psychology there will be very little cathartic medicine used. Physicians will be taught to rely more on suggestions, habits, food, massage, etc.

When not constipated, coffee in the morning is allowable.

SURVEY AND BACTERIOLOGICAL STUDY OF A BOTTLED SPRING WATER SUPPLY

WALLACE A. MANHEIMER, PH.D.
SECRETARY OF THE AMERICAN ASSOCIATION FOR PROMOTING HYGIENE AND PUBLIC BATHS,
New York.

The spring water industry has grown to large proportions during the last ten years without any considerable control by municipalities on the quality of the water served, or the methods employed in bottling, transporting, and handling the water. The unpleasant tastes in New York water has greatly increased the use of spring waters and makes this subject one of timely interest. The greatest consumption of this water takes place in the large office buildings, where in recent years it has become nearly the sole type of water used in the majority of offices. The growth of the water business has resulted mainly from the convenience in having readily available, iced water for employees. The inacessibility of the water taps in most offices, and the practical difficulty in cooling the tap water constitute the main reasons for the large expansion of the water business.

An adequate supply of cool drinking water, conveniently placed, was shown by Darlington to be of importance in maintaining the efficiency of the employees of the United States Steel Corporation. The demand for cool appetizing water in offices is so general and the convenience attending the use of a bottled water with its water cooler argue strongly for the continued expansion of the bottled water industry. The disagreeable taste in New York water, which, although not common, is operating as a powerful factor in increasing the use of spring waters.

Water, like milk, is a commodity consumed raw and entitled to the same care in handling bestowed on milk. So far as the writer knows no general survey of the bottled water industry has been made. The present survey, while limited to a study of one large distributor,* probably is typical of the larger bottled water supplies. A complete study, however, including the smaller spring water companies should be undertaken, stressing their methods of bottling and handling the water. It is by no means certain that the approved methods used by this and other large companies is general with all, particularly the smaller ones, and it is urged, therefore, that more stringent control be exerted to the end that the spring water served to the consumers shall be of uniform good quality.

*The study was made possible through the courtesy of Mr. A. Fast, president of the Eagle Spring Water Co.

The Survey

The spring is located about three-quarters of a mile up the side of a mountain and at least one hundred feet above any surrounding habitation. It issues forth from under a ledge of rock into a concrete retaining basin, provided with an overflow aperture. The water is piped from the center of the retaining basin direct to the bottling plant. The pipes are all aereal and entirely free from leaks. There is absolutely no chance of contaminating the water while en route from spring** to bottle.

The water is drawn directly from the spring into the bottles which are then corked, crated and shipped to the city. Samples of this water were taken at the spring, in the bottling house, and from the bottles in New York, and carefully examined bacteriologically.

The bottles before being filled are washed inside and outside with soap,*** then scalded, and rinsed with spring water over an inverted spray. Swabs and washings of these bottles were made and plated out on agar. The corks are all new and covered with tin foil. The tin foil was tested and found to be practically free from lead.

Tests

Ten separate analyses were made of the spring water taken at the source. A summary of the findings are tabulated here.

No.	count 37° C.	count 20° C.	B. Coli counts of 0.1 c.c.	1.0 c.c.	5.0 c.c.	Remarks
1.	0	0	—	—	—	Pure
2.	0	0	—	—	—	"
3.	0	0	—	—	—	"
4.	0	0	—	—	—	"
5.	0	1	—	—	—	"
6.	0	0	—	—	—	"
7.	1	1	—	—	—	"
8.	0	0	—	—	—	"
9.	0	0	—	—	—	"
10.	0	0	—	—	—	"

It will be seen from the bacterial data that the water taken at the source is of the highest possible purity.

Four samples of water taken at the bottling station gave the following results:

No.	count 37° C.	count 20° C.	B. Coli counts of 0.1 c.c.	1.0 c.c.	5.0 c.c.	Remarks
1.	0	0	—	—	—	Pure
2.	0	1	—	—	—	"
3.	1	3	—	—	—	"
4.	0	0	—	—	—	"

**Survey of a spring used by another bottling company, located about 60 miles distant from this spring also indicated a pure source of supply.

***The washing of the bottle on the inside is accomplished by means of an expanding rotary brush.

It is obvious that no substantial change takes place as a result of piping the water.

Tests on the bottled water, taken from bottles in New York gave the following results:

No.	count 37° C.	count 20° C.	B. Coli counts of 0.1 c.c.	1.0 c.c.	5.0 c.c.	Remarks
1.	0	2	—	—	—	Pure
2.	0	1	—	—	—	"
3.	1	3	—	—	—	"
4.	2	5	—	—	—	"
5.	1	3	—	—	—	"

A slight but insignificant increase in the counts after bottling and transportation were obtained.

Agar streaks made from swabs on the inside of the bottles just before filling were sterile. Streaks from the foil used to cover the corks were sterile in two cases and gave counts of 5, 3 and 6 bacteria in three successive swabs, respectively. The foil covered corks are satisfactory both practically and from a sanitary viewpoint.

Conclusion

The writer does not desire to draw any general conclusion, since this study is confined to one survey. It is his belief from this study, as well as from several observations made of one other spring, that the water taken at its source is probably pure in most cases. Careful studies of the methods of bottling and transportation should be made, however, of all companies.

In this survey the water at the source is of exceptional purity. The bottles are cleaned and properly handled, and care was exercised to maintain the sanitary rules necessary in handling a food product consumed raw.

1776 Weeks Avenue.

IS ENTHUSIASM PERMISSIBLE?

G. H. SHERMAN, M.D.
Detroit, Mich.

The medical profession is made up of individuals. These individuals are subject to the emotions and influences which affect men and women. Circumstances have brought about a very well-defined tendency on the part of many physicians to hold back, to question advances and to criticize. This is undoubtedly right, provided the tendency is not allowed to go too far. We know that scientists question advances in their respective fields. The physicists had a hard time believing the first reports of Alexander Graham Bell or Guglielmo Marconi. The medical profession has stumbled over almost every real advance that has been reported to it. Not one solitary report has been made without the most critical comment and many times this comment has been very strongly tinctured with derision.

In the past ten years, medicine has made more advances than in many decades previously. It is not necessary to enumerate them here. We are, however, especially interested in bacterial vaccines, and it will suffice to recall something of what has been said and written about this one single advance.

Certain members of the profession saw that the application of this new method of treating and preventing infections was likely to revolutionize a large share of the medical practice. When their suspicions began to be fulfilled in their personal experiences and in the practice of those with whom they were in intimate contact, it was easy for their interest to metamorphose into enthusiasm. And the enthusiasm of some occasionally leads them into deep water, just as the opposite tendency to criticize and belittle anything new or different has put some men into a position out of which it has been difficult for them to flounder.

The writer, a physician who had had over 15 years' practical experience with vaccine therapy and who had seen the waves of enthusiasm and antagonism, finds himself wondering if, after all, enthusiasm is not permissible at least as far as bacterial vaccines are concerned?

When we think of the huge number of cases in this category on record in the medical and sanitary literature of the world, when we realize how typhoid fever has been all but stamped out in the greatest armies ever seen on the earth, when we recall how acute as well as chronic infections have come into a position where we understand much regarding their origin and more regarding their successful treatment with bacterial vaccines than ever before—is it not permissible to allow a little enthusiasm, to flavor our work and our writings?

Enthusiasm has made possible what has been accomplished in conquering epidemics. Enthusiasm is the great force in developing and cultivating men's faculties in their adaptation of nature's forces in overcoming disease. By enthusiastically applying the discoveries made in bacteriology, the burden of disease is lightened, sickness becomes less frequent and less prolonged, a greater degree of health is secured, the efficiency of the individual and the nation is increased and life is lengthened and made more enjoyable. The eradication of bacterial infections looks more hopeful than ever, since standard bacterial suspensions have been successfully applied in the prevention and treatment of bacterial diseases. Bacterial vaccines offer the necessary stimulus in raising body resistance, preparing—so to speak—body cells (the immunizing mechanism) for the adequate production of anti-bodies that make germ life and its destructive invasion impossible.

There is good reason to be enthusiastic concerning the outlook for polyvalent bacterial vaccines.

The Ravage of Venereal Disease

Sir Jas. Chrichton Browne, of England, in his presidential address at the Bath Conference of Sanitary Inspectors, August, 1921, took up the subject of venereal diseases: "Not less than 10 per cent. of the population of our large towns," he said, "are affected with syphilis and a much larger proportion with gonorrhea. Gonorrhea is prolifis of sterility, blindness and of rheumatic and joint affections; and syphilis is the direct cause of a vast number of cases of abortion, miscarriage, still-birth, and infant mortality, and as a hidden assassin, is undoubtedly responsible for a large number of deaths that are attributed to other causes, such as aneurism, angina-pectoris, Bright's disease and cerebral hemorrhage. Syphilis is the sole cause of general paralysis of the insane, which kills 2,000 people in this country annually, and it is the inexorable bane of those wretched men you see staggering about with locomotor ataxy. It is a secret poison that has until recently been allowed to circulate freely, slaying our people, undermining their manhood and producing widespread invalidism and industrial incapacity."

"In our campaign against venereal disease many measures are necessary. We must have the suppression of unqualified quacks and herbalists, who have done so much mischief, and the prohibition of their alluring advertisements. We must have the improved and special teaching of the pathology and treatment of venereal disease to medical students and practitioners in our medical schools. We must have a net-work of clinics and hospitals throughout the country, in which treatment by the most modern and approved methods can be carried on and hostels for the prolonged treatment of women and girls. We must have laboratories in which pathological investigation and diagnostic work can be carried out. We must have the supervision of contacts and the effective following up of all disclosed cases. But, above all, we must have the education of the public as to the incidence and dangers of venereal disease and as to preventive measures, among which immediate personal disinfection must take the first place."—(*Medical Officer*, London, September 10, 1921.)

The Need of Pay Clinics.

One of the interesting topics of conversation among New York medical men is the need or otherwise of the pay clinic. The New York *Times* of Feb. 12 published in its news columns the following:

"The need for pay clinics, where persons unable to pay the fees of specialists and yet who do not wish to become charity patients, was told by Michael M. Davis, Jr., Secretary of the Committee on Dispensary Development of the United Hospital Fund of New York, in a recent address before the medical section of the New York Academy of Medicine.

"Mr. Davis quoted recent estimates worked out by the Bureau of Municipal Research, giving an allowance of $80 a year for physicians' and dentists' fees for a family of five, $43 for a single woman and $32 for a single man. Mr. Davis said that according to the same estimate, the minimum income for a single man in New York during 1921 was $1,093, for a single woman $1,118 and for a family of five $2,263, and asked how the estimates would stand with even one or two cases of ordinary illness and still less if treatment of the teeth, eyes or any chronic ailment were required.

"There are probably 2,000,000 or more persons in New York City and its suburbs, even in time of regular employment who are self-supporting and do not want charity, but who need medical service which they cannot pay for," said Mr. Davis. "Very little service can be bought by a family of five for $80 a year.

"If they spend more than that amount, they must take it from the allowance for food, clothing, fuel, light, rent or needful recreation. No serious or long continued illness or illness requiring expensive laboratory tests or the service of specialists could be paid for by such a family. The man who can pay $5 in the office of a specialist or for laboratory tests finds that there is nothing between the charitable dispensary and those prices which he cannot afford. There is a growing necessity for pay clinics where good medical service may be secured at prices within the reach of these people.

"Such a pay clinic is needed by physicians as well as by the general public, because physicians in general practice find many patients who cannot pay for specialists, for consultations or for laboratory tests which they should have. There is a particular need for such pay clinics in the evenings when working people can come without losing time and wages by leaving work during the usual hours of employment."

In support of the Davis viewpoint, Dr. J. Bayard Clark, one of New York's best known urological surgeons, prepared this statement for the *Times:*

To the Sunday Editor of the New York Times:

"The article headed, 'Pay Clinics Needed by Public Here,' in today's issue, is straight to the point. Just such clinics as your paper has drawn attention to are precisely what is most urgently needed in this city today for the self-respecting and honest people of moderate means who, as the article says, 'do not want charity.'

"These people are certainly entitled to the opportunity to pay for their treatment and they are entitled to have facilities provided for them which will give them the specialist's care needed, when needed, and at hours after work, and for fees they can afford.

"You are to be commended for bringing this subject to public notice, and public discussion.

"Certainly these people do not want charity treatment for they know as well as any that it is impossible to get something for nothing. That the economic law of balance and compensation will work its charge in somewhere. They want to pay. And if many of these people who are able to pay go to free clinics, as it is perfectly well known that they do, it is only because they are accepting the price of charity as the lesser of two evils as they see it.

"Pay clinics open in the evening and conducted by capable specialists would surely meet a long felt need. Unfortunately, it costs too much for most physicians to rent the necessary space and to equip it to make this ideal plan you have brought before the public in your article possible in New York; but there is another way to get the same result without resorting to the charity which your paper rightly says the people do not want.

"Before stating this plan, however, allow me to speak of the pay clinics which are charity, and which are just a little bit more character destroying than the free clinics which are charity. Any institution, of course, which is capitalized by charity or endowed by gifts of money, can only give charitable treatment to the recipient. There is no escape from this fact. The recipients of medical care in an institution set up in whole, or in part, by gifts of money and not investments of money are 'charity patients' whether they pay a fee or are treated free. And as your article truly says these people 'do not want charity.' If the fees amounted to enough to pay the way of the institution and pay a recognized interest on the money put into it, it would not be a charity institution and the recipients would not be charity patients. The distinction is plain and clear. To bring the results of a pay clinic founded on gifts of money into better relief one has only to visualize a daily newspaper, for example, founded on a sufficient endowment to enable it to give advertising space to 'worthy advertisers' for about half the price charged by a self-respecting and self-maintaining newspaper in the same town. The result would immediately be seen in the poor quality of public service rendered by the self-supporting sheet which had been surplanted and ruined by the paper which was practically giving its advertising away.

"Exactly the same results are seen in the services of the private practitioner when a capitalized charity becomes his competitor.

"This is the inevitable result of pay clinics founded on anything but honestly invested capital; but the writer does not presume that your article entitled 'Pay Clinics Needed by Public Here,' refers to anything but honorably established institutions which are in the best sense self-supporting and to be maintained on the merits of their own production.

"The public probably does not realize as well as the thoughtful members of the medical profession, that the chief reason the physicians who have located themselves so as to care for people of moderate means have been degraded to the degree which they have been is because of the competition of charity institutions which take as patients these very people of moderate means which as patients of the local practitioner mean his bread and butter.

"It is not to be forgotten that it is this general practitioner who, in his private professional work, is the trusted friend and adviser of the family unit in its critical periods of sickness and distress, and it is a public duty to guard his interests and see that he is neither starved nor driven to unprofessional practices to gain a livelihood.

"The following is the plan alluded to, and one which will entail no extra expense of rent or equipment. It will protect the interest of the general practitioner and help develop his professional ability. It will enable him to co-operate with the specialist and help both to work out the problems of diagnosis and treatment to the advantage of a public sorely in need of better medical and surgical attention.

"It is pretty well understood that the specialist is under heavy expense. It is necessary for him to have ample room and very exact equipment if he is to keep to a level of diagnosis and treatment of any scientific worth. He must have a rather exclusive practice, which means rather high fees, to keep him going. He usually devotes either the morning or the afternoon to his private work and spends the rest of his day doing hospital duty. This means that his office, treatment rooms, laboratory and equipment are free during the evening.

"The plan then is for him to utilize this space and equipment during the evening for those people of moderate means who can pay but moderate fees. His assistant, under his guidance and judgment, instead of spending his full time in clinics giving free treatment to these people who can and are anxious to pay, could maintain this service.

"The general practitioner and the specialist could thus be brought together in a useful way. Both would be recompensed, and both would render therefore a more responsible and valuable service. Under this plan the large numbers of honest, self-respecting and self-supporting people who are now in so unsatisfactory a position as far as *good* medical care is concerned would reap a great benefit."

J. Bayard Clark, M.D.

Opportunities for Service in Venereal Disease Clinics.

Many applications for assistants in venereal disease clinics have been received by the Associated Out-Patient Clinics. These positions are both for men and women, graduates and students. In most instances physicians with no special training in venereal disease will be considered. Any physicians who desire an opportunity to learn this specialty, should communicate with Dr. Alec N. Thomson, 15 West 43rd Street, New York City.

The Section on Venereal Diseases of the Associated Out-Patient Clinics, of which Dr. Thomson is Secretary, has offered to act as a clearing house for information regarding opportunities for dispensary assistants in the venereal clinics in New York City.

The above applications for assistants came in reply to a letter and questionnaire recently sent to the directors of the various venereal disease clinics, inviting them to state their needs for assistants and to specify not only the qualifications desired, but the clinical and professional opportunities offered.

Correspondence

An Opportunity for X-Scientists to Make Easy Money.

To the Editor of THE MEDICAL TIMES:

In a recent issue of the Camden *Daily Courier* Mr. Samuel J. MasDonald, of the Christian Science Committee on Publication for the States of New Jersey, disavows the first edition of Mrs. Eddy's book, "Science and Health," in which she declared that if one had sufficient faith the amputated arm would grow out again. Mr. MacDonald asks me to confine myself to the last edition of the book. This raises the question, was Mrs. Eddy's first thought of divine origin? If so why did she change in subsequent editions of the book? Why did she not stand firm in all the editions for what she declared in the first edition to be divine truth?

In eliminating the amputated arm from the subsequent editions Mrs. Eddy admitted that she was powerless over certain sorts of organic troubles. Now, if Christian Science cannot restore an amputated arm, what reason have we to believe that it can restore a lung wasted by tuberculosis? Or cure cancer? Or valvular disease of the heart? Or Bright's disease or diabetes? Must we conclude that by revising her book Mrs. Eddy gave up her claim to a divine revelation and adapted herself to public credulity, and not beyond it, that is not "over its head"? She did not show, at the outset of her career, as much horse sense and honesty as Mohammed who, when the mountain would not come to him, went to the mountain.

In New England, a former Christian Scientist, now a clergyman, has a standing offer of $2,500 for any case of organic disease cured by Christian Science.

I will give Mr. MacDonald, or any institution he may name, $2,500 if he will cure, by Christian Science alone, an organic case first diagnosed as such by medical experts. Mr. MacDonald refers me to the Christian Science churches near me for proofs of such cures, but that is putting the burden of proof on me. I have never been able to find such a case in Camden, and I have been here for thirty years.

Mr. MacDonald says I do not know the difference between infinite mind and mortal mind. Let me repeat: mind is function. Thought, reason and will are attributes of the mind. Thought can and does create things without reason, which is that faculty of the mind that deduces inferences from facts. Will, the dynamic force of the mind, executes the inference, or opinion, arrived at with or without reason. Thus, the organic ailments claimed to be cured by Christian Science did not exist except in thought and were cured in the same way, that is by way of auto-suggestion or auto-hypnotism.

Mr. MacDonald tells me to study the books on Christian Science. I have done so, and I agree to duplicate, by means of auto-suggestion, many of the cures ascribed by Mr. MacDonald to Christian Science.

My challenge as to cures of organic ailments is unanswered, and it is up to Mr. MacDonald, and not me, to produce the evidence. He claims but does not prove. He asks me to prove his case for him. Ridiculous!

WILSON G. BAILEY, M.D.

Camden, N. J.

The Physician's Library

Ephraim McDowell. By August Schachner, M.D., of Lolisville. 331 pages. Philadelphia and London: J. B. Lippincott, 1921.

"The Father of Ovariotomy" and "The Founder of Abdominal Surgery" is coming into his own after a long period of silence on the part of medical writers interested in the work he did so much to further. This book prseents an interesting sketch of McDowell's friends and relatives, of his professional life, and of the conditions in his section of the country at the time he was flourishing.

Not the least interesting feature is the picture we are shown of his medical confreres. His professional work not only in Kentucky but in Scotland, where he studied under Bell, is brought out in considerable minutiate, and the appendix on Jane Todd Crawford, who rode many miles on horseback through the wilderness to submit to McDowell's "experiment" is dramatic in its interest.

It is not necessary to go into the story of his work because it is more or less well known. The outstanding feature of this work is that it contains so much detail of the life of this surgeon and his Kentucky surroudings.

Life of Jacob Henle. By Victor Robinson, M.D., Editor of Medical Life. 117 pages. New York: Medical Life Company, 1921.

There is little romance in the life of the average anatomist, and one can hardly find that Henle's career offered any exception to this rule. He was a plodder, a hard worker and, like most German scholars, thoroughly painstaking and methodical. Dr. Robinson possesses the happy faculty, however, of weaving romantic threads where the average writer would weave only a plain and somewhat drab cloth. He has surrounded Henle in this way with a sort of halo which gives a real interest to the study of this man's life. His pleasant style serves to embellish what would otherwise be a commonplace book and he transposes it into an interesting and very sketchy volume.

Submuccous Resection of the Nasal Septum.—William Meddaugh Dunning, M.D. of New York, New York: Surgery Pub. Co., 1922.

This little book of about 100 pages and 25 illustrations shows painstaking endeavor and much thought about the submucous resection of the nasal septum on the part of the author. In addition to the technic of the submucous resection, it has chapters on the common septal deviations, and the author recognizes three types, the S-shaped deviation, the Z-shaped deviation and the nondescrip deviation. He also has a chapter on the anatomy and physiology of the nose, emphasizing only on the physiological side the functions of breathing and smelling. He also has a chapter on Saddel-back nose, and a chapter on typical case histories and their significance. While the author believes in undue importance of the indications for this operation, the book would undoubtedly be useful to those who do the operation because if the operation is to be dne it should be done well.

Conservative Treatment of Cervical Lymphatics in Intraoral Carcinoma.

One hundred and forty-eight cases of carcinoma of the tongue are analyzed by Douglas Quick, New York. Sixty-nine were primary cases without palpable involvement of the nodes, and of these, thirty-four were classed as surgically operable. Of this group of thirty-four cases, twenty-nine were free from clinical evidence of disease for periods ranging from three months to three years; five cases developed nodes after treatment of the primary lesion with radium. Of these, three were clinically free from disease following the combination of surgery and radium. One died a year after operation with recurrences both local and regional, and the other was lost track of. Of the primary cases with definite involvement of the nodes on admission, only three were operable. These were treated with radium for the primary growth and a combination of surgery and radium for the neck. All three were clinically free from disease—the longest case being of nearly three years' duration. Of the recurrent cases, and of these, two were well for periods of one and one-fourth years, and one and three-quarter years without development of nodes to that time, while the third case wast lost track of.

Of the total series, neck dissections were performed in fifty-eight cases. Of these, recurrences appeared in fifteen, or 25.8 per cent.; of 162 cases of lip carcinoma, ninety-two were primary without demonstratable involvement of the nodes; eleven were primary with nodes, and fifty-nine wer recurrent. Of this total group, 115 cases have been traced to date. Eighty, or 69.5 per cent., are clinically free from disease for periods ranging from four months to four years, the average period being eighteen months. Of the ninety-two patients wthout nodes on admission only eight are known to have developed nodes after treatment of the primary growth with radium, although it is to be supposed that certain others are present in the group of untraced cases. Of these eight cases, seven are now clinically free from disease following our usual neck technic for periods ranging from four months to four years. The other patient died of recurrence in the neck one year after his original operation. In all, twenty-two neck dissections were performed. Fifteen patients have now been free from disease for periods ranging from four months to four years, the average being eighteen months. Six patients died at periods of from four months to two years after operation, the average duration of life after operation being fourteen months. One case has recently recurred and is steadily becoming worse.—(*J.A.M.A.*)

Seven hundred and seventy thousand boys reach the age of 21 years every year in the United States. Before they reach the age of 30, 60 per cent. of them or over 450,000 will have contracted gonorrhea or syhpilis or maybe both. Thus is youth tainted because of ignorance and false modesty.—LEE A. STONE, M.D.

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A Literary Diagnosis by Exclusion, Continued

In the March issue of the MEDICAL TIMES we attempted, unsuccessfully, to diagnose by the method of exclusion the authorship of an essay on "Medicine" in a volume recently published by Harcourt, Brace and Company, entitled Civilization in the United States: an Inquiry by Thirty Americans. We say unsuccessfully, since the gentleman whom we accused of responsibility, Mr. Henry L. Mencken, has given us his word of honor that he did not write the article and that he had nothing whatsoever to do with its contents.* Moreover, he informs us that the author is actually a man engaged in research, and that his connections and standing are of the best.

In view of the aforesaid facts we are glad to retract our accusation without any qualification whatever and to apologize contritely to Mr. Mencken.

We wish to go further than this and to retract our rather severe strictures upon the ethics of the firm of Harcourt, Brace and Company. We offer apologies to this corporation and to the editor of the work because we have the word of Mr. Mencken that a man whose credentials must have seemed perfectly good to them wrote the article, and not Mr. Mencken himself.

Our error was a natural one to make, but now the matter is as plain as a pikestaff. Mr. Mencken is in a position to state the facts about the mysterious author, in other words, he is not Anonymous to Mr. Mencken! Mr. Mencken has medical friends, and he lives in Baltimore, in the shadow of the Johns Hopkins Hospital. This was to be a diagnosis by exclusion and we seem to be in a fair way toward narrowing the field of our quest.

We were at great pains in our first editorial to point out the striking similarity in style of the anonymous writer to that of Mr. Mencken; we might better say identity in style. This near neighbor of Mr. Mencken has been sensitized by and saturated with this style, and has moreover a genuine genuis for literary imitation. It is Mr. Mencken's own assurances regarding this sinister figure which compel our new line of reasoning. We can see the silly ass sitting down to assail his medical brethren in the spirit of Mencken's "Politics." This spirit was eminently fitting in the case of the essay "Politics," but totally out of place in the article "Medicine."

We also pointed out in our earlier editorial that the author revealed deficiencies in technical equipment which made us doubt the statement of the book that he was a physician who had gained distinction in the field of medical research. But our inference now would be that he is a man who has long worked or taught in a relatively narrow field and has become a bit obfuscated about such matters as the distinction between mania à potu and Korsakoff's syndrome. We are simply driven to this conclusion by Mr. Mencken's voucher.

How can this diagnosis by exclusion be carried to a successful completion, in order that this masked vilifier of the medical profession shall stand revealed to his brethren in what he himself calls the "dubious" field of medical research?

Mr. Mencken is excluded, and the profession outside of Baltimore is excluded. Our quarry has to be smoked out of a small group revolving in and about the Johns Hopkins University. His identity must be pretty well known already to medical Baltimoreans associated in one way or another with this small group.

We make no doubt that our Baltimore confrères will now take up this curiously interesting inquiry.

*It is important to note that Mr. Mencken carefully avoids denying that he played a part in the procurement of the article.

Disease and the Jew.

It seems to the writer that there can be no correct understanding of the Jew, and of his problem, without knowledge of the medical and ethnical facts in the case. The Henry Fords make prejudices and superstitions serve in the place of facts and rational ideas; their ignorance and malice make it impossible for them to synthesize the problem because they are incapable of seeing its elements in medical and ethnical perspective.

Those in America who would wish to deal more or less violently with the Jew would do well to familiarize themselves with the following remarks of Dr. Fishberg: "When liberated from the Ghetto they soon begin to free themselves from their ritualism. When liberated from oppressive laws they soon show a low birth rate. Political disabilities and social ostracism are the most potent factors working in favor of Judaism. The laws enacted and enforced by oppressive governments are more instrumental in maintaining Judaism than all the Rabbis in the world. Moreover, these laws are keeping up Judaism numerically not only in their own country, but by producing a surplus of Jews who, by emigration to western countries, replace those who have been lost through assimilation."

Persecution develops the survival potentialities of the Jew and offsets the destructive effects that success seems to bring to him. These destructive effects are giving much concern to Jewish physicians. Diseases both of metabolic and nervous types flourish alarmingly among

successful Jewish groups, while race suicide claims them more surely than any other class. It is the poor, orthodox and oppressed Jews who have the large families and the capacity to survive.

Those who would wish to rid themselves of the Jew have to consider that in applying oppression they foster tremendous survival forces. Wherever, in America or elsewhere, he is not persecuted, a survival factor is definitely eliminated, while the success factor is left operative, exacting a heavy toll. This toll, it would seem, could be made devastating in scope if a conspiracy were to be hatched having as its object transcendent success for the Jews at all points of our national life.

Success is the line of least resistance for the Jew, unless handicaps are made unreasonably severe. There is no mystery about it. He is superior in intelligence to the human being of other races, excepting perhaps the Scotch, the Greeks and the Chinese, who can at least hold their own against him.

The sensuality so notable among the lower Jewish types is not racial but environmental; they seek sensuality when deprived of their rights; hence the high birth rate among the lower orders.

Ethnically, it is a fact that many of our prejudices are really against Tartars, Hungarians, etc., rather than against Jews. It is a fact that the uncouthness of many individuals who are nominally Jews is an ethnical derivative. Hordes of the Russian Jews, so called, are Tartar-blooded in the main, and as far removed from the sons of Abraham ethnically as those typical Scotch highlanders whom one encounters among the French Canadians, descendants of military progenitors assimilated in colonial days, speaking the language and professing the faith of the "Habitant" of old Quebec.

If Henry Ford had wished to destroy the Jews his precious *Dearborn Independent* should, paradoxically enough, have initiated a campaign designed to give the Jews special privileges not accorded to other citizens, or at least calculated to set up in the minds of the people sentiments of the utmost good will toward them. But Henry is not exactly an Iago, intellectually speaking. Like all the other would-be Balkanizers of America he would not rate very high in a Binet-Simon test.

If precedence is given to the Jew, his knell is sounded. It is a fate as tragic as that of Oedipus

Why Pick on Christian Science?

We wonder at people seeking comfort through Christian Science for all their physical ills, real and imaginary, forgetting that it is customary with the American people to seek comfort for all their other ills through means fully as open to criticism.

Christian Science seems to the writer a logical development along so-called religious lines in a country like the United States. It is often said that it could not have developed in any other country in the world, and yet the reasons why this is so have not been very closely examined.

The typical American has always been ready to deny the reality of social, political, or economic ills. He has refused to see the meaning of lynchings or to deal with this social disease, just as though such things really did not happen; he just won't believe the truth about his government; and as for economic matters, well, all's well with the world, and that's all there is about it. It is as though what goes on at the United States Steel plants just doesn't go on at all; anyway, everything is all right.

Now this is just what the Christian Scientist does in the matter of physical ills, and so should we all, were we logical. The Christian Scientist refuses to see the meaning of his ataxic gait or to deal with it as such, just as though it really didn't exist. He just won't believe the truth about his lungs. All's well with the liver, and that's all there is about it. It is as though what goes on in the heart just doesn't go on at all; anyway, anything is all right.

We should like to know what quarrel any American could have with the adherents of such a cult. Big business is all right, imperialism isn't doing any harm, our prisons are not a disgrace, swollen fortunes are being well used, Congress is not composed of incompetent imbeciles in the main, there is no reason for unrest—in fact, there is no unrest, we are to "keep smiling" in the face of child labor and child malnutrition, and there is nothing the matter with American literature, or art, or civilization in general. If you persist in seeing the reality of any social, political or economic evil you are regarded as a bore, or a nut, or a grouch, or a knocker, or a high-brow.

Why, in the name of heaven, should there be any disease? If we must be super-optimists in all other respects, on pain of ostracism if nothing worse, why are we permitted no illusions with respect to physical ills?

Strange Talk.

Our understanding of the moron is that he is an individual who can never pass beyond the mental age of from seven to twelve years. To judge from an editorial which appeared in the New York *Times* on March 2, the editor of that newspaper seems to believe that morons can be lifted to higher levels of thinking and feeling. The *Times* also seems to implicate Professor William C. Bagley, of Columbia University, in this mode of reasoning. Both speak of democratic development, aiming to elevate the common man to a position of supreme collective control. But the *Times* is at pains to point out that according to statistics quoted by Commissioner of Education Graves, 47.3 per cent. of the white men in the draft were morons. What, then, is the common man, mentally speaking? And how can individuals be elevated above their mental limit? What is the magic in democratic development that would lift them by their mental bootstraps? The *Times* says that what is needed, educationally, is such a continued exploring of the possibilities of the common mind as will insure the lifting of the children of twelve to higher levels of thinking and feeling. Our own view would be that what is needed is a discovery and sifting of the uncommon minds, a view which is shared by the *Times* along with its optimistic hypothesis regarding the common mind. It is the Lincolns, and not the mob, who are fit for supreme control. If democracy means the supreme collective control of things by common men, if common men are what the draft studies revealed, and if we are right about our understanding of the mental limitations of morons, then democracy cannot be idealized, and if applied, cannot work well. The would-be idealists will have a hard task to convince us that political virtue can be founded upon confessed mediocrity. Such reasoning is worthy of the morons themselves.

The Alleged Increase in National Vitality.

We are quite willing to believe that the span of life has been lengthened five years in America since 1909, as stated by a committee of the American Engineering Council, appointed by Secretary Hoover, but we are not inclined to accept the glittering generality that "the national vitality is increasing," that is, as a whole. Of

course, the statistics of such colleges as Vassar, Harvard and Yale would show an increase among a selected class that has had all the benefit of the modern knowledge of cooking, diet and sanitation. The nation is healthier in spots, as it were. We have groups corresponding to the fine physical types one sees in England, where the industrialized masses present such a sorry sight. There are great numbers of persons in America whose standard of living is apparently high, as judged by the quality of their housing, but whose standard is really very low, when judged by the food they eat; that is, they pay such high rents that they have to economize unduly in the matter of diet. We don't believe that the great salaried middle class is increasing in vitality.

The number of people seriously ill at any given time has been reduced in about the same time from an average of 3,000,000 to 2,400,000, according to the same committee, but this proves nothing regarding vitality, since it is attributable to preventive medicine—improved sanitation and better medical care.

It is the decrease in infant mortality that has made the longevity statistics look roseate, and not any essential increase in the general vitality; that, we believe, has actually decreased.

Miscellany

CONDUCTED BY ARTHUR C. JACOBSON, M. D.

An Interesting Viewpoint.

"One cannot read some of the modern medical literature, particularly on the side of public hygiene, without giving one's sympathy to the tubercle bacilli and the spirochætæ. Science of that sort ceases to be a fit concern for superior men, gentlemen; it becomes a concern for evangelists, uplifters, bounders. Its aim is no longer to penetrate the impenetrable, to push forward the bounds of human knowledge, to overreach the sinister trickeries of God; its aim is simply to lengthen the lives of human ciphers and to reinforce their delusions that they confer a favor upon the universe by living at all. Worse, it converts the salvation of such vacuums into a moral obligation, and sets up the absurd doctrine that human progress is furthered by diminishing the death-rate in the Balkans, by rescuing Georgia crackers from the hookworm, and by reducing the whole American people, the civilized minority with the barbarian mass, to a race of teetotaling ascertics, full of pious indignation and Freudian suppressions."

—H. L. MENCKEN, in the introduction to "We Moderns," by EDWIN MUIR.

Kidney Function.

A. R. Richards, of Philadelphia, presents these points:

1. New evidence has been secured that increment of blood-pressure, uncomplicated by increment in velocity or volume of blood flow in the kidney, increases urine formation. This is regarded as added support of the filtration hypothesis.

2. Evidence has been secured indicating that some of the most weighty objections to the filtration hypothesis can be reasonably explained in a manner consistent with it.

3. Indications have been shown that nervous stimuli and chemical substances may exert different degrees of effective influence upon the afferent and efferent vessels of the glomerulus and that this may be a factor in that automatic regulatory control of glomerular filtration which is responsible in part for the maintenance of constancy of blood composition.

4. And, finally, a new description of the mode of circulation through the glomerular vessels has been presented which, when verified and extended, we hope will be of service in the study of the normal and pathological physiology of the kidney.—(*Am. Jour. Med. Sci.*, Jan., 1922.)

Diagnosis and Treatment

*Transfusion In Infants With Malnutrition. The use of the Superior Longitudinal Sinus. (Author's Abstract.)

S. B. Burk and L. Fischer have made a thorough study of the above subject. They state that after careful search they were not able to find the use of transfusion in malnutrition recorded in any recent textbooks on disease of children.

The indications for transfusion in malnutrition are noted as follows:

1. Progressive loss of weight and improper metabolization of food resulting in atrophy with a senile expression.
2. Cold extremities; heart sounds feeble; pulse thready and symptoms pointing towards a general exhaustion.
3. Catarrhal or fermentative colitis with dehydration of the blood, feeble pulse, and signs of imminent collapse.
4. Acute infectious diseases such as typhoid, prolonged scarlet fever, diphtheria, influenza or in post-pneumonic conditions wherein a secondary anemia follows.
5. General weakness in premature infants following a prenatal disease as conenital syphilis, or a weakness due to improper food given by a tuberculous mother before the latter comes to the clinician.
6. Weakness due to tropical diseases.
7. The presence of avitaminosis in addition to the use of antiscorbutics.

Furthermore, maternal feeding affords the best known food. Despite maternal milk many infants are underfed. This deficiency can be supplied by giving complementary feedings of cream and carbohydrate—chiefly maltose. If the infant continues to lose weight and the extremities are cold, then we must direct our attention to the circulatory system. In marasmic infants we have tried hypodermoclysis. The injection of four ounces of warm normal saline solution every 24 hours is often times helpful. Warm saline colonic instillations given at a temperature of 105 to 108 degrees F. will in many instances add fluid to the circulation. Hypodermic medication such as adrenalin or strychnin fails to stimulate the heart action in many instances. In this class of cases the recourse to transfusions may be the only means of saving life. Although there have been excellent results in some cases, we have had failures in other cases.

After a detailed review of the method and avenues of approach to the circulation in children, the following observations are made:

There are four places selected for transfusion: (a) The median caphalic; (b) the median basilic; (c) the external jugular, and (d) the superior longitudinal sinus.

Attempts to enter the veins at the elbow or at the neck are not infrequently attended with great difficulty. Much valuable time may be lost in futile attempts. Exposure by cutting down on the veins subjects a weakened patient to the additional dangers of shock and infection.

In using the superior longitudinal sinus, all objectional factors are eliminated. Up to the age of two years to two and one-half, the anterior fontanelle lends itself admirably for this operation. The authors believe that the more simple the technic, the more readily it is carried out. They make use of the ordinary instruments and containers to be found in a doctor's office.

The following apparatus is used: One 30 c.c. glass syringe (Record or Luer); several 18 gauge 4 cm. needles; 1 ordinary glass jar or drinking glass; 1 glass stirring rod; 1 bandage or rubber tourniquet; 1 tube of sterile 25 per cent sol. sodium citate; tr. iodin; 95 per cent alcohol; sterile gauze.

Their opinion relative to the donors is stated in the following remarks: "It is well known that the use of indiscriminately selected donors may nulify the value of the transfusion or even be disastrous to the recipient. It is, therefore, necessary to select a vigorous, healthy individual with an approximately normal red blood cell count and hemoblobin content, whose history is negative for lues and whose Wasserman blood test is negative. No one with an elevation of temperature or convalescing from an infectious disease should be used. Moss recommends cardiacs as donors who have a normal blood count and in whom venesection may be indicated. When the foregoing qualifications have been fulfilled the dangers of incompatibility due to hemolysis and agglutination must be eliminated."

*All cases reported were transfused at The Infantorium.

The hemolysis and agglutination tests are made according to the Vincent modification of the Moss technique:

Two prepared sera, a clean glass slide, and a number of clean toothpicks are needed to make the test. One or two drops of Serum II is placed on the left half of the slide, and an equal amount of Serum III on the right half of the slide. The ear or finger of the person tested is punctured and a small drop of blood is transferred on the point of a knife blade or with a toothpick to each of the sera in turn. The blood is stirred into the serum. The blood should be transferred before the coagulation has commenced and care should be taken to avoid mixing the two sera. Agglutination of the corpuscles is accelerated if the serum is agitated by the slide being tipped from side to side. If the reaction is negative, the corpuscles make a uniform suspension in the serum. If the reaction is positive, the masses of agglutinated corpuscles usually appear in less than a minute and are discernible to the naked eye. Rouleaux formation can be eliminated if the mixture is stirred; agglutination is not broken up in this manner. The reading should be confirmed by microscopic examination.

In order to eliminate contamination in handling the blood and sera a different toothpick or wooden match-stick is used in each step of the technique.

After obtaining the propor donor, the front of the elbow region is painted with a 3½ per cent tincture of iodin and a tourniquet applied just below the deltoid region lightly enough to cause the veins to stand out prominently but not so as to obliterate the arterial pulse. The median cephalic or median basilic vein (whichever is more readily accessible) is then punctured, and a predetermined amount of sodium citrate solution is added to make a 0.3 per cent solution, the assistant constantly stirring the mixture slowly.

The recipient is prepared in the following manner: The infant is wrapped in a sheet, with the head exposed, and placed flat on the back while the assistant steadies the head with face upward, near the edge of the table. The anterior fantanelle is painted with a 3½ per cent tincture of iodine and the posterior angle of the fontanelle located with the index finger of the free hand.

The precautions observed at the time of injection of the blood are as follows: The citrated blood is drawn into the syringe with the needle attached. The needle is then slowlv introduced into the posterior angle for a distance of one to two cm., parallel to the direction of the inner table of the skull. On entering the sinus, one gets the definite sensation of being within the lumen of a vessel. This is similar to the experience in piercing the dura in doing a lumber puncture. The operator steadies the needle with one hand and slowly injects the fluid. There should be no resistance in injecting the fluid if the needle is in the sinus. If resistance is met with, the needle is withdrawn and the procedure is repeated. When in doubt it is always well to withdraw some blood before the injection is begun. The injection of an ounce of fluid should take from 1½ to 2½ minutes. Pressure with a sterile piece of gauze over the site of puncture for a few minutes is all that is necessary for the after-care of the scalp.

Their end results as tabulated are:

1. Fourteen transfusions were performed on 10 infants.
2. The ages ranged from 9 days to 6 months. Seven were under 2 months of age.
3. The amount of blood injected averaged about 1 ounce.
4. The time of injection averaged about 90 seconds.

Gonorrhea in Men: Further Observation on the Use of Acriflavine.

The opinions and procedures outlined by Gray Phillips are based upon the clinical and microscopical studies made on 84 patients with involvements of various parts of their genito-urinary organs. It has been shown that solutions made in distilled water are efficacious and that for injections, a strength greater than 1:4,000 is not necessary. Patients presenting a purulent discharge, who are free from indications of infection of the deeper urethra, whose urine when passed into two glasses is cloudy or hazy in the first and clear or almost so in the second, are irrigated once daily for a week and instructed to take two injections each day. Sodium bicarbonate and much drinking of water relieve painful urination in a few hours. Gonococci which have become buried deeply in follicles along the urethra and have become surrounded and closed off by a round-cell infiltrate are evidently not reached and destroyed by the dye during the first two weeks of treatment. During this time also the dye, because it is an irritant, may be causing areas of infiltration along the canal. This treatment has sometimes resulted in complete cure. More often the following procedure is more efficient:

On the fourteenth day, if the urine is free from cloud, even in the presence of shreds and a slight watery discharge, a curved sound, 27 French, is passed after the bladder is distended with 120 ccm. (4 oz.) of solution. The patient voids and the bladder is again filled. The entire urethra is gently palpated and massaged over the sound, especially the infiltrated glands. The fossa navicularis just within the meatus should be massaged. If the disease progresses favorably another curved sound, 30 French, is passed on the seventeenth day, after filling the bladder. Should no infiltrated glands be palpable the injections are stopped until the twenty-first day. Then, if the urine is free from a cloud, a sound, 30 French, is passed, followed by irrigation with a 1.3000 silver nitrate. If indurations are present along the canal, this procedure should be delayed for a week. A slight discharge occurring at this time should be examined for gonococci.

Of course, the procedure varies with the patient. Some do not need so much treatment.

A cure may be considered to have been brought about when the urine becomes free from pus and shreds, when the expressed prostatic secretion presents normal lecithin bodies and is free from pus cells, and when the discharge resulting from dilation with a Kohlman dilater and silver nitrate irrigation is free from gonococci. In early cases, cure is effected in six weeks.

Acriflavine is more efficacious than the proteid silver compounds. When brought *into contact* with gonococci its germicidal effect is absolute. It is useless in epididymitis. Except that massage may be instituted earlier when the bladder is filled with the dye, it has no direct effect on prostate-vesiculitis.—(*Long Island Med. Jour.*, September, 1921.)

Bleeding from the Rectum.

Joseph F. Saphir, of New York, said at the last meeting of the American Proctologic Society that blood passed through the anus from any part of the gastro-intestinal tract is a most alarming symptom. The nearer the source of the bleeding is to the anus the brighter and fresher the blood is, and the further away, the darker and more clotted it is. The general appearance of the patient is often an index of the importance and severity of the bleeding. He described as sources, internal hemorrhoids, ruptured external hemorrhoids, fissures and ulcers, prolapse of the rectum, polypi, multiple ademonata, intussusception of the sigmoid, chancres, chancroids, and condylomata, villous growths, systemic diseases as malaria, scurvy, tuberculosis, etc., hemorrhagic proctitis and carcimona.

He then considered primary and secondary operative hemorrhage describing how such accidents occur, how they may be avoided, and how treated; and laid particular stress on the danger and deceptive character of concealed secondary hemorrhage, the possible need of hypodermoclysis or transfusions in its treatment.

He said that bleeding from the rectum is so common that many patients neglect it so long before consulting a physician, and the physicians when consulted, neglect adequate examination so long, that serious hemorrhage and profound anemia often result before proper attention is given to it. For similar reasons carcimona is often overlooked till it is too late. And he concluded that the fault lies in the lack of proper teaching of digital and proctoscopic examination, so that students are sent out from medical schools unprepared to interpret the importance of significance of rectal bleeding, and unprepared to give the sufferers the proper care and treatment.

Radium in Non-Malignant Gynecological Conditions

In all cases of menorrhagia of the menopause in which neither microscopic nor clinical investigation has disclosed any other distinct pathological conditions, treatment by radium is indicated, says Dr. C. J. Broeman.

In women under the age of thirty-five, presenting cases of menorrhagia or metrorrhagia which have resisted all medical treatment, the use of radium is indicated, but extreme care must be taken to employ only a moderate dosage.

In the treatment of uterine fibroids, radium is the treatment of choice if the fibroid has not extended above the umbilicus, and has no evidenced pressure symptoms. It should be employed in all cases where surgery is absolutely contra-indicated.

If radium is to supersede surgery in any non-malignant pelvic disorder it will probably be in the treatment of uterine fibroids.—(*Va. Med. J.*, Sept., 1921.)

Public Health

Gorgas Memorial, An Institute of Tropical and Preventive Medicine

Of particularly deep interest to all members of the medical profession and to all others interested in questions of public health and sanitation is the recent announcement of the plans of the Board of Directors of the Gorgas Memorial for the establishment of a Memorial Institution in the City of Panama for research and the extension of means of prevention of tropical diseases.

Anyone who has seen the old Panama at the time of the abandonment by the French of the work of the first canal, involving so much wasted energy, the loss of thousands of lives and some hundreds of millions of dollars, could not but be struck with the present aspect of Panama, its splendid sanitation, its beautiful cities, its five hospitals, and above all, by the completion of the Panama Canal itself, making Panama one of the most beautiful and salubrious spots in the world.

It is well known to members of the medical profession that the accomplishment of this great work and the sanitary regeneration of Panama are due to the efforts of the late William C. Gorgas, Surgeon General of the United States Army, and to his efforts, more than to any other, success for the work must be accredited.

Coupled with his earlier work in Cuba, the accomplishment of General Gorgas in conquering yellow fever and malaria and conclusively demonstrating the fact that health, even in the tropics, is a purchasable commodity, has sent forth his fame throughout the world. Perhaps no single life has done more for the good and well being of humanity, and his great attachment for Panama has made the proposed Memorial to carry on the work so ably started, the most practical tribute which could be conceived to his memory.

The honor for the conception of this idea and of bringing it into aceutl existence belongs to Dr. Belisario Porras, the President of the Republic of Panama, who in the name of his government has tendered the site, a building, and all required equipment, valued in all at approximately $500,000. At the request of Dr. Porras, Admiral Braisted, formerly Surgeon General of the United States Navy, with the co-operation of others equally interested in making this Memerial possible, incorporated the Gorgas Memorial Institute for the purpose, in addition to directing the scientific work, of raising an endowment fund of five million dollars for maintenance. The following officers and directors were elected:

President, Rear Admiral W. C. Braisted, U. S. Navy (Retired).

Vice-President, Dr. Franklin Martin, Secretary General—American College of Surgeons.

Directors: Dr. Belisario Porras, President of the Republic of Panama (Founder); Dr. A. S. Boyd, Chief of Surgical Service, Santo Tomas Hospital, Panama; Surgeon General Hugh S. Cumming, United States Public Health Service; Surgeon General Merritt W. Ireland, United States Army; John Bassett Moore, Judge of the International Court of Justice, The League of Nations; Leo S. Rowe, Director General, Pan American Union; Surgeon General E. R. Stitt, United States Navy.

Dr. Richard P. Strong, of Harvard University, chosen to head the Scientific Board, will be assisted by Admiral E. R. Stitt and Lieutenant Colonel J. F. Siler, U. S. A. Other members of the Scientific Board will be announced at an early date.

The Advisory Board, of which Secretary of State Hughes is Honorary Chairman, consists of the diplomatic representatives of all the Central and South American countries and representative committees of the leading national medical and surgical associations, public health groups, and many Southern Societies by which Gorgas was beloved.

The proposed Memorial will be built adjacent to the new two million dollar Santo Tomas Hospital, and the use of its complete facilities has been tendered the Gorgas Memorial to aid in the launching of the work.

The Memorial Building itself will consist of a dignified classic structure patterned after the lines of the Pan American Union in Washington, D. C. It will house the laboratories and provide facilities for the teaching of students from the various tropical countries and from our own leading schools of tropical medicine, such as Harvard, Johns Hopkins, and the University of California.

In commenting upon the field of work before the Institute, Admiral Braisted stated that among the diseases which will be studied in addition to yellow fever and malaria, are dengue, pellagra, beriberi, leprosy, cholera, and the various mycoses. It is the consensus of opinion that tremendous advances can and will be made through the efforts of the research work in this field.

The tropics, which are so prolific in vegetation of every kind, have been equally fertile in the development of all types and kinds of dread diseases, which tended to make them unsuited and impossible of habitation until careful sanitation made them safe. They then can become the most desirable, the most attractive, and the most prosperous of abiding places. This very fact has made the City of Panama extremely desirable as a home for the work to be undertaken.

The humanitarian benefits to accrue from the establishment of this wonderful tribute to General Gorgas are almost beyond conception. Its complete success means the fulfillment of General Gorgas' greatest desire, that of eliminating these devastating tropical diseases, and at the same time is a fitting recognition of the world-wide importance that the profession of medicine played in the construction of the Panama Canal.

Prevention and Treatment of Venereal Diseases.

England has considered the question of venereal diseases for many years. The results obtained by the Ministry of Health through these years of experience warrant the continuance of such activities. A recent circular of the Ministry, addressed to local authorities urges the continuance of these principles. The educational, legal, recreational, and medical measures must go on.

In the medical field, various problems have arisen, particularly during and since the war. In a few areas, ablution or disinfecting centers have been instituted to provide for the disinfection by skilled attendants, of persons who have exposed themselves to the risk of infection. In England during the war, an Interdepartmental Committee appointed by the Minister of Health came to the conclusion that although certain drugs if skillfully applied can prevent venereal disease, the prophylactic packet and the instruction of men as to its use did not produce such a general reduction as to warrant its recommendation by the government. It was found, however, that when preventive treatment was provided by a skillful attendant, the results were better. A special committee of the National Birthrate Commission of Great Britain unofficially took up the question and came to the same conclusion.

The question which confronts the British government is that there is no unanimity of opinion on the medical side as to the practicability of self-disinfection for civilian population, whereas on the moral and social side there are most weighty objections advanced against it. This question is one in which the moral and social considerations, as well as the medical, are important. In the circumstances the British government has decided that it cannot give official support to self-disinfection as a policy. The Ministry of Health is of the opinion, however, that the arguments which have influenced the British government in deciding against this measure, do not apply to the provision of ablution centers. Final conclusions as to the value of such centers cannot be drawn, but experience thus far, warrants the continuance of the experiment.

State Health Department Opens New Campaign Against Diphtheria Through Use of Schick Test.

The New York State cities of Auburn, Schenectady and Syracuse have been selected as strategic points for the beginning of a new and aggressive campaign against diphtheria which is now being conducted by the State Department of Health in co-operation with local health and school officials, the American Red Cross and other civic agencies. This scourge of our children, which was considered almost conquered after the discovery of antitoxin, has recently shown a disturbing tendency to increase again. The central feature of the renewed attack which the public health authorities are therefore directing against diphtheria in New York, as in many other states, is the examination of large numbers of school children by means of the so-called Schick test, through which it is possible to determine whether or not a person is susceptible to diphtheria. Subsequently, those who are not proven by this test to be immune may be protected for life by injections of a combination of toxin and antitoxin. These harmless procedures have been perfected and extensively utilized in New York City during the past eight years and the State Department of Health believes the time has come to urge their use in all the larger cities of the State. At the Department's request, Dr. Abraham Zingher, of New York, under whose direction more than 100,000 school children have been "Schick-tested," is delivering addresses in a number of up-state cities at meetings arrangd in co-opration with the local medical societies, health departments, school authorities and civic associations in order to acquaint the public generally with the use of this method for the control of diphtheria.

"Diphtheria is today an absolutely preventable disease," said Dr. Zingher, speaking recently at a meeting of teachers and

parents in the auditorium of the Schenectady High School, "for we have found that the protection once established in a child by the method developed in the New York City Health Department Laboratories has continued for at least eight years and without doubt is permanent throughout life. The purpose of the Schick test is to find out whether or not a child is immune to diphtheria. This is done by giving the child a tiny injection in the skin of the arm and then watching whether a red spot is to be seen on the arm at this point a few days afterwards. By the presence or absence of this spot the physician can tell positively which children may get diphtheria and which never will. If the spot shows that a child may get diphtheria, then it is possible by means of three more injections of a different kind, given about a week apart, to protect the child against diphtheria. This protection may be proven by a repetition of the Schick test six months or more later. Children or adults are not made sick by this method of diphtheria protection. Out of over 100,000 children that have been tested in New York City no child has been known to have become ill as a result of the 'Schick Test.'"

According to statistics recently analyzed by Dr. E. S. Godfrey, Director of the Division of Communicable Diseases of the State Department of Health, diphtheria in New York State, as in other parts of the country, has shown a marked increase in the number of cases and deaths during the last three years. Following the introduction of antitoxin in 1894 the drop in the mortality from diphtheria was sudden and startling. The death rate from this disease, which in 1887 was 113.2 per 100,000 of the population in New York State fell as low as 14.8 in 1916. But the rate for 1919 took a sharp rise to 19.9, remained at 18.2 in 1920, and fell only to 16.1 in 1921.

"Another striking fact brought out by this study," says Dr. Godfrey, "is that diphtheria is a disease primarily of the larger cities. The rates, as well as the number of cases decline as we go from the larger cities to the smaller, from the smaller cities to the villages, and from the villages to the towns and rural areas. Even the scattered groups of cases reported from rural districts will most frequently be found in the immediate neighborhood of the large communities. It is not surprising, therefore, to find that the marked rise of the state's diphtheria rate in 1919 and 1920 was chiefly due to the epidemic which prevailed in Buffalo during those years. Last year, likewise, an excessive number of cases occurred in Syracuse."

In advocating redoubled activity in the effort to reduce diphtheria in up-state cities, the State Department of Health points to the clear evidence that this increase in the last few years has taken place entirely outside of New York City. In former years diphtheria was very prevalent there, causing two or three times as many deaths as in the remainder of the state. So effectively were the methods of modern control applied, however, that the diphtheria death rate was reduced until last year it fell 1.3 points below that of the rest of the State. In fact, New York City now has the lowest diphtheria rate, 15.5 per 100,000 which it has ever experienced, and the metropolitan district does not share in the recent increase indicated by the statistics for the State generally.

Diphtheria is the foremost cause of the deaths of children between three and six years of age and fully 55 per cent. of all deaths from the disease occur among children between the ages of one and six years. For this reason it is especially important that children of these ages be protected against diphtheria which is frequently brought home to them from the schools by their older brothers and sisters.

Domestic Quarantine and Venereal Disease.

"The migration of persons suffering with venereal disease from their home State to another State without first procuring from their local health officer a permit stating that their travel is not dangerous to public health violates the Federal law, forbidding the spreading of contagious diseases and will be rigidly suppressed," says the U. S. Public Health Service.

"Last spring the Attorney General, at the request of the Service, instructed all United States attorneys to co-operate fully with it and to prosecute offenders vigorously. Since then several violators have been sentenced to reformatories, where their disease-spreading activities have been stopped and they themselves are receiving proper medical treatment.

"The law and the regulations based on it are not widely known as they should be, and the objects sought in their enforcement are not everywhere clearly understood. The law seeks to control the spread of disease, but not necessarily to prevent the travel of venereally diseased persons. Such travel if undrtaken under proper precautions in search of medical help, will be encouraged by the Service. The law, however, seeks to close every channel through which venereal disease may be spread; and to do this it has been found necessary to put a stop to the movements of those who seek to migrate from one State to another in order more safely to carry on the business of spreading disease.

"When such persons and their associates learn that travel from one State to another while venereally diseased leads to arrest and severe punishment they will have an added incentive for submitting to voluntary treatment; and the day will be hastened when every infected person will at once place himself or herself under the care of a skilled physician of his or her own selection.

"At present it is probable that very many persons either never receive proper treatment or that they cease treatment too early in the belief that they are curd and thus become dangerous. Laws on this subject differ in the different States; and this fact leads to migration from those whose laws are rigid to those whose laws are less so.

"No attempt either by the U. S. Government or by State governments to police the State borders seems practicable. The laws of practically all States, however, require physicians to report all venereal cses that come to their attention; and a judicial or police investigation of the history of any apparent new-comer who chances to be arrested will early disclose most of the new arrivals in the State. These may then be proceeded against under United States law.

"Proceedings," adds the U. S. Public Health Service, "are based on the Interstate Quarantine Regulations, whose making by the Secretary of the Treasury was authorized by Congress Feb. 15, 1893 (27 Stat., ch. 114, p. 449), amended Mach 3, 1901 (31 Stat., ch. 836, p. 1086). Objections on the ground that the regulations are insufficient or defective or that Congress may not delegate its legislative authority are without merit. The Secretary's act in making the regulations is administrative and is authorized by the act of Feb. 15, 1893. The penalty for violation is fixed by Congress, is legal, and has been sustained in United States courts. Details of the above are given in Reprint 693 of the U. S. Public Health Service, just issued.

Permits for travel obtained from the local health officer must state that the travel in the opinion of the officer is not dangerous to the public health. The traveller must state where he intends to reside; and he must agree in writing to report to the proper health officer there within one week after arrival and to continue treatment under a reputable physician until the health officer certifies that he is no longer infectious. The health officer who issues the permit must promptly notify the new health officer, who must take appropriate action.

Observations on Bacillus Botulinus Infection of Canned Spinach.

According to S. A. Koser, R. B. Edmondson and L. T. Giltner, Washington, D. C., Bacillus botulinus, Type A, is able to multiply and to produce its characteristic toxin in canned spinach, although the development of the organism in this food product was found to be somewhat irregular. In some instances, there was evidence of a rapid multiplication, while in others there was apparently neither growth nor toxin formation. In all of the latter cases, however, the organism was found to be viable. A temperature of 37 C., as contrasted with room temperature, accelerated the development to a certain extent. When multiplication had progressed readily, 0.5 c.c. of the spinach juice per os proved sufficient to kill guinea-pigs, usually within eighteen hours. The growth of B. *botulinus* in canned spinach is accompanied by the evolution of gas as well as by the elaboration of the specific toxin. In only one instance had toxin formation advanced to such a stage as to produce a fatal result, while at the same time gas production either had not occurred or was insufficient to cause bulging of the can. Of 174 samples of canned spinach taken from suspected lots, *B. botulinus* or its toxin was found in six. In every case, the organism was of the A type. These six toxic cans were all "hard swells," and when opened, the odor was distinctly offensive. The destruction of foodstuffs deemed to be abnormal, either by appearance of the containers or by the odor, should prevent the greater number of the outbreaks of botulism. From the public health aspect of the problem, the last point is of especial importance.—(*J. A. M. A.*)

Tuberculosis and Prostitution

In a recent address before the Berlin Medical Society Dr. J. W. Samson discusses the subject of tuberculosis and prostitution from observations which he commenced in 1914 on 1,300 women under the control of the Berlin police. With the exception of Spillman, of Nancy, who at the International Congress of Tuberculosis in 1905 described tuberculosis as a venereal disease, secondary only in importance to syphilis and gonorrhea, no previous writer appears to have dealt with the relations between tuberculosis and prostitution. He found 10 per cent. of the women studied had more or less active tuberculosis, syphilis was present in two-thirds of the 1,300.—(*Lancet*, September 24, 1921.)

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The St. Louis Meeting of the American Medical Association.

The arrangements of the St. Louis profession for the meeting places for the session of the A. M. A., which is to be held in their city May 22-26 next, are singularly fortunate and convenient; never has the Association been so well favored in this respect. The district in which the meeting is to take place is at the west edge of the business section of the city, easily accessible from all directions by street car or otherwise and not more than fifteen minutes street car ride from the most distant hotel. The grouping of the meeting places is so compact that should one walk from the Registration Building (Moolah Temple) to the farthest hall it can be done in ten minutes or less; from section to section is a matter of from one to five minutes. The convenience of the location and arrangements of the different halls is more outstanding than in any other city in which the Association has met, and a decided improvement over the accommodations which were had at the meeting in St. Louis, 1910.

The Registration office, Post Office and Commercial Exhibit is to be in the Moolah Temple) Shrine, a beautiful and commodious building on Lindell Boulevard, two blocks west of Grand Avenue. At the other extremity of the group is the Odean, the home of the St. Louis Symphony Orchestra, with a main hall which seats better than 2,000, and several lesser halls. The main hall will be used for the opening session. Its acaustics are particularly good and suited to our purpose. The Sections on Practice of Medicine and of Diseases of Children meet here. In the assembly hall of the same building the Sections on Pharmacology and Therapeutics, and on Pathology and Physiology will meet. (It will be noted that there has been an aim to foregather closely allied sections.) The Sheldon Memorial, a very beautiful new hall on Washington Avenue, one-half block west of Grand Avenue, which most admirably meets all requirements, will be the meeting place of the Sections on Ophthalmology, and Laryngology, Otology and Rhineology. The Section on Surgery, General and Abdominal, and on Obstetrics, Gynecology and Abdominal Surgery, will be held in the Third Baptist Church on Grand Avenue, a situation well suited to the demands. The Sections on Orthopedics and Nervous and Mental Diseases will meet in the Law School of the St. Louis University, on Lindell Avenue, a few steps west of Grand. The hall easily seats 500 and is both comfortable and convenient. Dermatology and Syphilis and Urology will use the large Union Methodist Church, on Delmar Avenue, just west of Grand, which meets every requirement. The Sections on Gastro-Enterology, Proctology and on Preventive Medicine will use the large hall in the Musicians Club on Pine Street, east of Grand Avenue, and next to the building of the St. Louis Medical Society, where the House of Delegates will hold its sessions. The Section on Stomatology is assigneed to the assembly hall of St. Peter's Parish House, one block west of Grand on Lindell. Immediately in this district will be found three of St. Louis's most important clubs, the St. Louis, University and the Columbian. Restaurant catering to every grade of patronage are numerous in the district and precautions have been taken to insure that normal rates continue during the meeting.

The St. Louis profession is preparing for an unusual attendance; hotel reservations are coming in rapidly but it is purposed that even the late comer shall be comfortably housed. The wise traveler, however, makes his reservation as early as he finds it possible. Dr. M. B. Clopton, 3525 Pine Street, St. Louis, is Chairman of the Committee on Sections and Section Work.

The Syphilitic Factor in Essential Epilepsy.

Novick makes study for the purpose of determining whether syphilis is a factor in a considerable number of epileptic cases, as evidenced by history of infection, clinical manifestations, and corroborative proof of the Wassermann tests, and also the frequency of a positive Wassermann alone in the blood serum of epileptics in the absence of clinical manifestations of syphilis.

The diagnosis of the cases under consideration has been established by constant and careful observation in U. S. P. H. S. Hospital No. 34. The clinical observations of the cases were in no way influenced by the laboratory. The incidence of frank syphilis associated with epilepsy in a series of 231 cases was found to be about 2.2 per cent. The occurrence of a syphilitic factor as evidenced by repeated positive Wassermann tests alone, in the absence of clinical support, was found in 2 per cent of the cases.—(*Public Health Reports*, August 26, 1921.)

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This Doctor proved it—and he says:—

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"About two years ago I was treating the little daughter of Mrs. C. W. R.—for Potts Disease of the spine; the last dorsal and first two lumbar vertebrae being involved. She was put into a plaster cast, and improved somewhat, but owing to the low location of the kyphosis it was impossible to get a satisfactory result and after two or three applications, the child refused to have another cast applied. A rigid brace was out of the question and I knew of no non-rigid one. Luckily Mrs. R.—knew of yours, and we applied it. Yesterday (April 12, 1921) she came to my office and I was surprised and delighted at the wonderful change in the child's condition. She had grown five inches, and gained 32 pounds. Although the kyphosis remained and there were scars from the sinuses, the spine was straight and almost as flexible as normal, and she looked the picture of health. I examined the appliance with great interest and was pleased with it. I shall use it in my practice, which is Orthopedic Surgery as it is more comfortable than a plaster or celluloid jacket and can be taken off at any time and re-applied. I congratulate you upon the workmanship and perfect fit."

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Necessity for Independent Nursing Schools.

Until schools for nurses are taken out of the hospitals and, like schools for physicians, are lodged in separate buildings, financed separately, there can be no hope for any substantial advancement in nursing education, according to Isabel M. Stewart, Assistant Professor in the Department of Nursing and Health, Teachers College, Columbia University.

Miss Stewart makes an attack upon the "strong reactionary forces," which, she says, have been trying to pull down all that leaders in the nursing profession have been accomplishing lately. Included in these reactionaries she places "some influential commercial interests" and some "politically powerful physicians," whom she charges with working against the so-called "overtraining of nurses."

She complains against the prevalence of untrained nurses, who are sought to take the places of real nurses when financial conditions make it impossible to hire a graduate nurse. Miss Stewart says, however, that the untrained nurse charges almost as much as the trained one and is giving inferior service.

EXPERTS IN THE PROFESSION.

"Every advance in medical science or in hospital administration or nursing education has created a demand for new varieties of experts, such as the nurse anesthetist, the hospital technician and the trained instructor of nurses," declares Miss Stewart in a bulletin of the Bureau of Education. "Private nursing has also undergone some expansion, but the greatest development has been found in the field of public health work. Where ten years ago a few hundred nurses only were to be found in visiting, nursing or social welfare work, there were in 1918 approximately 8,000 employed in this country by public school, State and city boards of health, industrial establishments, child welfare organizations and other civic and social agencies. The number is now increased to over 10,000. Most of the work is not solely or even mainly for the relief of sickness; it is quite as much for the prevention of sickness. During the past ten years the nurse has established herself as one of the mainstays of the public health movement in this country, and the movement itself is going ahead by leaps and bounds."

Miss Stewart tells of the nurses' part in the war, but decries the fact that since the cessation of hostilities there has been a falling off in the number of women willing to take up nursing. She continues: "While it is true that the type of applicant in many schools has continued to improve, and that several of the best schools in the country report no shortage of students, the scarcity of nursing applicants in the large majority of hospitals throughout the country has probably been more acute than at any previous time."

She then takes up the present educational system and pleads for financial support to take the nurses' school out of the hospital.

NURSING SCHOOLS LACK FUNDS.

"The plain facts are," Miss Stewart asserts, "that nursing schools are being starved and always have been starved for lack of funds to build up any kind of substantial educational structure. As some one has recently said, the nursing school has been literally buried in the hospital, and few people have been aware of its existence. It has fed on the crumbs that fall from the hospital table—a very frugal table, as every one knows. The educational interests of the school have had no chance whatever against the pressing economic interests of the hospital, and it is probable that even if the hospital recognized its educational obligations, which it has never done, it would find considerable difficulty in meeting them as they should be met.

"The inevitable conclusion is that there is no hope for any substantial advancement in nursing education until the nursing school can be lifted out of the hospital and placed on its own feet. This does not mean that pupils should not be trained in hospital wards, but that the nursing school, like the medical school, should have an independent financial status, and the power to work out its own system of education, unhampered by the complicated and often crushing demands of the hospital.

"If this is to be done, some form of endowment must be found for nursing schools, or they must be supported by State or municipal funds. Up to the present time there have been no large gifts or endowments for nursing education in this country, apart from Mrs. Helen Hartley Jenkin's gift to the nursing and health department of Teachers College, Columbia University. It is time that the public should realize the great need in this country for funds to develop nursing education and should give as freely to this as they do to other forms of educational work.

TRAINING HAS PROGRESSED.

"In pite of poverty and all the difficulties inherent in the system of training, the leaders in nursing education have been driven on in their effort to better conditions, because they knew just what it meant to expose sick people to the care of ignorant and untrained nurses. Some of them had struggled with the dirt and disorder and the unspeakable moral conditions of the old hospitals and they existed less than fifty years ago, when modern nursing was first introduced into this country. This has made them uncompromising in their fight to uphold such standards as had already been established in nursing education.

"The progressive element in nursing has always been supported by the more forward-looking members of the medical profession, but there have always been strong reactionary forces at work pulling down what they have built up. Some influential commercial interests have been steady and unscrupulous opponents, and, unfortunately, there have also been a number of medical men working against what they have called the 'overtraining of nurses.' These physicians are not, as a rule, representative men in their professions, but they are often politically powerful and their opinions carry quite undue weight with the general public.

"The temporary scarcity of nurses during the influenza epidemic brought this opposition into prominence again. It was claimed that the trained nurse was too expensive, and that what was needed was a domestic type of worker who would do the work of the home and care for the sick patient as well at a small wage. It was urged that such workers needed little preliminary education and a very brief training, a few weeks or months being sufficient to qualify them for the care of the sick.

"While the avowed purpose of the whole agitation has been to supply nurses for people of limited incomes, there is no evidence that this result has been achieved. The semi-trained or untrained workers seems to be charging practically the same rates as the trained nurse; so the public is getting a distinctly inferior type of service at little, if any, reduction in the cost.

"The worst feature of the whole situation is that the women who are being brought into the field and usurping the name of nurses are discouraging better women from entering the profession. They are a menace to the sick, because they assume the responsibilities they are in no way fitted to carry, and they create a false sense of confidence in both doctors and patients, who have learned to rely upon the skill and experience of the trained nurse and do not realize the untrustworthiness of this counterfeit variety. In some cities thousands of these so-called nurses have been foisted upon the public."—(*New York Times.*)

Hospital Information Bureau.

Following the survey of hospital work in New York City made by the Public Health Committee of the New York Academy of Medicine and the disclosed need of a central agency of information about hospitals, the United Hospital Fund has organized a Hospital Information Bureau with offices at 15 West 43rd Street.

The aims of this bureau are to keep in touch with hospital work and progress in New York City; to furnish information to all interested with regard to administration, record-keeping and other facts concerning hospital work, organization and facilities; to study and make known the hospital needs of the city; to prepare exhibits; to maintain a library of hospital reports and statistics; also of record forms and blanks used in the several departments of the hospitals; to publish annually, or more often, information concerning hospitals to promote uniformity in hospital reporting; and, whenever called upon by the haspitals, to assist in such administrative and efficiency studies as would be of value to the hospitals, municipal and private.

The committee in charge of the bureau are as follows: Mr. Francis Smyth, Chairman, Trustee of the United Hospital Fund; Dr. W. Gilman Thompson, President of the Reconstruction Hospital; Dr. S. S. Goldwater, Director of Mt. Sinai Hospital; Mr. Julius A. Stursberg, Trustee of the Lenox Hill Hospital; Mr. Henry C. Wright, Trustee of Bellevue and Allied Hospitals.

Dr. E. H. Lewinski-Corwin, Executive Secretary of the Public Health Committee of the New York Academy of Medicine, has been appointed Director of the bureau.

The reproductive function is divine and is deserving of a place on the shrine of life before which those called into existence by its force must bow. Nature never intended that what she controls should ever be looked upon as being unclean.—LEE A. STONE, M.D.

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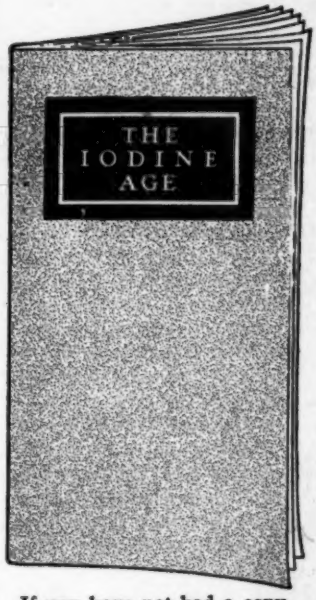

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This product may be had from druggists or from Intravenous Products Company of America, Inc., 121 Madison Avenue, New York, in ten mil ampoules, representing sodium iodide 1.5 gm. (23 gr.) guaiacol in 0.12 gm. (2 gr.). Dispensed in boxes of six.

Tuberculosis kills. Syphilis kills, maims, causes insanity and crime; reaches into the family from grandfather to grandchild. —Lee A. Stone, M.D.

A Thorough History An Important Factor In Syphilis

Dr. C. J. Broeman says the introduction of the Wassermann reaction as a means of diagnosing the presence of syphilis made many physicians feel that it was no longer necessary to take the trouble to obtain a thorough personal history for the patient under examination. Therefore, since 1906 when the Wassermann test first came into general use, the obtaining of an acurate history has been given less and less attention.

The author believes neglect to get an accurate and complete history is a very serious oversight and that implicit dependence on "the Wassermann" very often leads to grave errors in diagnosis, and that these may extend not only to the management of the case but also to serious imputations upon the moral character of perfectly innocent persons. He cites several cases of his own where dependence upon serum reaction alone, would have led to very serious blunders, and believes that such incidents must be common in the practice of others, whether specialists or general practitioners.

The examining physician must use tact and discretion in obtaining the history, but he must be firm and insist upon getting full details, impressing upon the patient the importance of "making a clean breast of it" in order that complete and rapid cure may be effected. The physician's attitude must be always one of scientific detachment, and moral and social considerations banished from the patient's mind so far as possible. If a patient refuses to give the necessary facts the wise practitioner will be justified in refusing to treat the case.—(*Amer. Jour. Syph.*, 5:565, Oct., 1921.)

Chymogenized Milk.

Milk is the universal food. In some cases it is hard to handle because the acid stomach forms indigestible clots. This curdling may be overcome without altering the value of the milk. In chymogenized milk the casein is precipitated in flocculent particles. In this form the casein is easily digested. Where the whole milk is wanted, boil, let cool to 105 degrees F., and add Chymogen.

If whey is wanted heat the milk to 105 degrees F., add Chymogen. When the curd is set, cut, drain off whey and use. Chymogen is from the Armour Laboratories.

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The Sachs-Georgi Reaction in the Spinal Fluid of Patients With Syphilis

Harryman compares the Sachs-Georgi and the Wassermann reactions on the spinal fluid in 379 cases. In three hundred and twenty-three of these cases, an absolute agreement is shown, 85 per cent. If the cases are included that are in practical agreement, that is, doubtful vs. positive, 344, or 91 per cent., agree, and 35, or 9 per cent., disagree. The most noticeable divergence is in the earlier forms of syphilis, showing no clinical symptoms of signs of central nervous system involvement. Author concludes that the Sachs-Georgi reaction furnishes a means for an earlier serodiagnosis of central nervous system syphilis than the Wassermann test.—(*Arch. Derm. and Syph.*, September, 1921.)

Septic Infection.

Gradually but none the less surely physicians are realizing the life-saving value of iodin in the treatment of septic conditions. To accomplish the results desired it is necessary, however, to give iodin to effect. To do this it is essential to use a preparation that will not upset the digestion nor give rise to other disagreeable effects, and it is the notable virtues of Burnham's Soluble Iodin in these respects that account for the rapidly growing use of this product in the treatment of septic infections. Improvement in the temperature, respiration and pulse is the guide. The dose depending on the gravity of the case should vary from 10 to 100 minims every hour or two until conditions improve, then lessen dose. In severe cases it is given preferably by hypodermatic injection, full strength, very deep into gluteal muscles and repeated until temperature subsides, then diminish dose. The class of cases in which these large doses intramuscularly are usually necessary are puerperal sepsis, septicemia, pyemia, pulmonary abscess, septic peritonitis, etc. It goes without saying that the dose must be large to stimulate the resistive forces of the body and produce the antitoxic effect desired. Very rapid and brilliant results may be expected, however, if this method of administration is followed. Many an otherwise hopeless case has been saved by this line of treatment.

Butyn.

Butyn is a new local anesthetic put out by the Abbot Laboratories. Dr. A. L. Bulson, of Fort Wayne, Ind., reached these conclusions in reference thereto:

1. It is more powerful than cocain, a smaller quantity being required.
2. It acts more rapidly than cocain.
3. Its action is more prolonged than that of cocain.
4. According to our experience to date, butyn in the quantity required is less toxic than cocain.
5. It produces no drying effect on tissues.
6. It produces no change in the size of the pupil.
7. It has no ischemic effect and therefore causes no shrinking of tissues.
8. It can be boiled without impairing its anesthetic efficiency.

Influenza Again.

In many sections of the country influenza is again rampant. The infection on the whole is not so severe as in previous years, usually running a shorter and milder course. But the remedy that proved most effective in the past is the one to be applied to the present crop of cases, to wit, Calcidin, the iodine-calcium combination for which we are indebted to the Abbott Laboratories, of Chicago.

Against influenzal colds and respiratory ailments in general, nothing else succeeds so frequently, and no matter what the treatment, Calcidin should always have a part in it. When commenced early and persisted in, pneumonia is not likely to develop. This is not fiction nor mere surmise. It is a fact borne out by experience.

And this suggests the question of prevention. What can be done? Chlorazene solution consistently applied to the nose and throat (as a spray or gargle) seems actually to prevent or abort the infection. The results following its use in certain large stores and factories during the worst of the epidemics, encourage this belief.

Venereal diseases exist mainly because society still places a taboo on the mention of the natural forces of the body which lead to the reproduction of the species and refuses to allow them to be discussed.—Lee A. Stone, M.D.

Acute Infections of the Nose and Throat

Every Winter and Spring bring their quota of naso-pharyngeal infections. The great dangers of these extending to the various sinuses and ears, or of being the fore-runner of graver respiratory diseases, particularly pneumonia, make painstaking and effective treatment of even the simplest cold both urgent and necessary.

The ease with which **Dioxogen**, when used as suggested, will quickly control the great majority of colds, and not only avoid their obvious dangers, but give the patient gratifying relief from local congestion, with its often severe discomfort and distress, emphasize the desirability of employing it at the earliest evidence of an infection.

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At the earliest possible moment the nose and throat should be swabbed thoroughly tho gently with cotton pledgets saturated with Dioxogen, diluted one part to three of warm water, especial care being used to reach back of the faucial pillars. If the condition indicates a severe infection, this swabbing by the medical attendant should be done twice a day. In addition to this, the patient should spray the nose and throat every hour or two with Dioxogen in a strength of two to four teaspoonfuls to a half glass of warm normal salt solution. The rapid control of the infection means grateful relief and the effectual prevention of complications and sequelae.

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Endoscopic Removal of Sand Spurs From Larynx and Tracheobronchial Tree.

H. Marshall Taylor, Jacksonville, Fla., states that the flora of a locality is an etiologic factor in foreign body lodgment. The larynx is the most frequent point of lodgement of the sand spur when aspirated. The sand spur as a foreign body in the air passages is seen most frequently in children. The sand spur has no inherent property. It should be placed in the category of a foreign body producing only mechanical effects. The study of a series of the same type of foreign body in the air passages, from the standpoint of etiology, diagnosis, localization and pathology, will aid the endoscopist to arrive at conclusions relative to them. Such conclusions are more accurate than those arrived at when a series of foreign bodies of various types and of different physical characteristics is considered.—(*J. A. M. A.*)

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